Appendix A

Notice of Preparation and Public Comment Letters

DATE: April 22, 2022

TO: Interested Persons

FROM: Chris Elias, Executive Director

RE: **NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR THE MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION PROJECT**

COMMENT PERIOD

April 22, 2022 – May 23, 2022

DOCUMENT AVAILABILITY

Website: www.sjafca.org/projects/mossdale-tract

SCOPING MEETINGS

In-Person Meeting, May 9, 2022; 6:30 p.m.: Manteca Transit Center, 220 Moffat Blvd. Manteca, CA 95336

Virtual Meeting, May 12, 2022; 11:30 a.m.

To join the virtual meeting, please use the following Zoom meeting link details:

Link: https://us02web.zoom.us/j/2484657696
By Phone: 1-669-900-6833
Meeting ID: 248 465 7696

Trustee and responsible agencies and members of the public are invited to attend and provide input on the scope of the EIR. Written comments regarding relevant issues may be submitted during the meetings.

INTRODUCTION

The San Joaquin Area Flood Control Agency (SJAFCA) is the Lead Agency for preparation of an Environmental Impact Report (EIR) for the Mossdale Tract Area Urban Flood Risk Reduction (UFRR) Project (proposed project). The EIR to be prepared by SJAFCA will evaluate potential significant environmental effects of the proposed project and other actions associated with construction and operation and maintenance of the proposed project. Written comments regarding the issues that should be covered in the EIR, including potential alternatives to the proposed project and the scope of the analysis, are invited.

The EIR for the proposed project is being prepared in compliance with the California Environmental Quality Act (CEQA). Consistent with the requirements of CEQA Guidelines section 15082, SJAFCA as lead agency has issued this Notice of Preparation (NOP) to inform responsible

agencies, the public, and trustee agencies of that decision. The purpose of the NOP is to provide information describing the proposed project and its potential environmental effects to those who may wish to comment regarding the scope and content of the information to be included in the EIR. Agencies should comment on such information as it relates to their statutory responsibilities in connection with the project.

The EIR will provide an evaluation of potential environmental impacts associated with development of the proposed project. The proposed project location, description, and environmental issue areas that may be affected by development of the proposed project are described below. The EIR will evaluate potentially significant environmental impacts of the proposed project, on a direct, indirect, and cumulative basis; identify mitigation measures that may be feasible to lessen or avoid such impacts; and identify alternatives that may lessen one or more potentially significant impact to the proposed project.

PROJECT BACKGROUND

On March 9, 2015, the City of Lathrop authored a Concept Proposal for a State Urban Flood Risk Reduction (UFRR) grant to design fix-in-place improvements to the Reclamation District 17 (RD 17) levees to achieve an Urban Level of Protection (ULOP) equivalent to a 200-year level of protection. On May 15, 2015, the State Department of Water Resources (DWR) responded with a grant to prepare an UFRR study of alternatives and preliminary design of the preferred flood risk reduction project alternative from that study for the 22,400-acre Mossdale Tract area which was identified as being at risk of flooding from a 200-year flood event, with this risk being significantly increased under future climate conditions. The Mossdale Tract area includes RD 17 (16,110 acres), portions the Cities of Stockton, Lathrop, Manteca, and unincorporated San Joaquin County (see **Figure 1**). In November 2017, SJAFCA, consisting of the City of Stockton, San Joaquin County, and the San Joaquin County Flood Control and Water Conservation District, modified its joint powers authority (JPA) structure to add the Cities of Lathrop and Manteca. The UFRR grant agreement and lead agency status were then transferred to SJAFCA in March 2020.

The primary flood risk in the Mossdale Tract area is from geotechnical failure of the existing levees. Levee overtopping or flanking is also a risk in the larger floods, especially in the future with climate change scenario. Geotechnical failures caused by through-levee seepage or under-seepage are typically sudden and unpredictable, and can produce large volume, high velocity flood flows. These failures come with little warning, with minimal time for evacuation and emergency actions. Overtopping and flanking floods are much more predictable, so evacuation is more effective for these failure mechanisms.

The Mossdale Tract area flood events generally occur during the winter months when colder air and water temperatures significantly increase the risk of death by exposure. The risk probability of unexpected levee failure (coupled with the consequence of basin-wide flooding) presents a continued threat to public safety, property, and critical infrastructure in the Mossdale Tract area. The UFRR study included technical evaluations of hydraulics, geotechnical conditions, cost estimates of potential alternatives, levee performance, multi-benefit features, and others. The UFRR study selected features of three initial alternatives to develop a hybrid alternative that could be evaluated and compared with the initial three alternatives. DWR and local stakeholders each provided input for “Alternative 4”. The differences were minor, but important, so Alternative 4 was presented with four minor permutations, represented as Alternatives 4a through 4d. The final selected alternative in the UFRR study (Alternative 4a) is the proposed project summarized below to be analyzed in the EIR.

PROJECT LOCATION/SETTING

The Mossdale Tract area (proposed project area) covers 22,400 acres and includes RD 17 (16,110 acres), portions the Cities of Stockton, Lathrop, Manteca, and unincorporated San Joaquin County (see Figure 1). The RD 17 levee system is comprised of State-Federal Project levees (also referred to as State Plan of Flood Control [SPFC]) along the San Joaquin River and French Camp Slough, which form the west and north borders of RD 17, and a non-Project dryland levee to the south. The land generally slopes east to west, and there is no levee along the east side of the RD 17 jurisdiction, so the interior drainage watershed extends to the east of RD 17. The proposed project area includes the SPFC levees, RD 17's non-Project dryland levee, the Mossdale Tract area, and areas to the west along the San Joaquin River identified for the potential development of ecosystem restoration features.

PROJECT DESCRIPTION

PROJECT OBJECTIVES

The overall objective of the proposed project is to provide increased public safety benefits by rehabilitating and improving flood risk reduction infrastructure to achieve a 200-year ULOP for the Mossdale Tract area. Objectives include:

1. Improve long-term operations, maintenance, repair, rehabilitation, and replacement (OMRR&R) over time.
2. Modernize the flood risk reduction infrastructure to accommodate future performance and climate change resiliency goals identified in the Central Valley Flood Protection Plan and in SJAFCA's Climate Change Adaptation Policy.
1. Implement a multi-benefit flood risk reduction project that: (1) improves ecological function and habitat in the flood-system, and (2) contributes additional societal benefits such as recreation where feasible.

PROJECT ELEMENTS

The proposed project would include the construction and operation of flood risk reduction and multi-benefit components in and adjacent to the Mossdale Tract area which are summarized below. Specifically, the following are the primary elements of the proposed project:

1. Fix in place and potential levee setback improvements with habitat enhancement and revegetation
2. Dryland levee extension
3. Ecosystem restoration at multiple sites
4. Recreational features along the levee system

The overall schedule to complete construction of the proposed project is anticipated to begin in 2025 and proceed over three years to completion in 2028. The proposed project elements are described below and are identified on **Figure 2**.

Flood Risk Reduction Components

Fix in Place and Potential Setback Levee Improvements - The following describes the various levee improvements that would be constructed and operated within the levee rights-of-way and easements under the proposed project.

1. Existing Dryland Levee Reconstruction and Seepage Berm. These improvements would consist of raising and widening the levee and constructing a drained seepage berm. They also include reconstructing pipe penetrations that cross the levee.
2. Cutoff Walls. The improvements would consist of constructing a fix-in-place traditional cement/bentonite slurry cutoff wall of varying depth along portions of the existing levee alignment.
3. Seepage Berm. The improvements would consist of constructing a drained seepage berm of varying width along portions of the existing levee alignment.
4. Erosion Repairs. The improvements would consist of supplementing riprap rock slope protections on the waterside of the levee along portions of the existing levee alignment.
5. Encroachment Remediation. The improvements would consist of removing high hazard encroachments.
6. Pipe Penetrations Rehabilitation. The improvements would consist of reconstructing pipe penetrations that cross the levee.
7. Levee Raise. The improvements would consist of raising the height of levee along portions of the existing levee alignment and extending the landside toe to meet levee slope design standards.
8. Potential Setback Levee. The improvements would consist of constructing a setback levee to meet the ULOP standards at a designated sharp bend in the San Joaquin River and connecting to existing levee segments.

Dryland Levee Extension – This improvement would extend the existing dryland levee by approximately one to two miles to the east as needed to prevent flanking during flood events.

Multi-Benefit Components

Ecosystem Restoration – The proposed project would locate undeveloped land on the water side of the levee system to create ecosystem restoration sites. Parcels of land are currently under investigation for meeting restoration criteria based on existing land habitats, elevations, and other opportunities for gaining natural ecosystem functions appropriate for the lower San Joaquin River. Because the locations and designs of these restoration sites are still under development, analysis of these project components will be done at a programmatic level in the EIR.

Recreational Features Along the Levee System – This component would develop recreational features, including recreational paths, along the top of levee and landside toe. Because the locations and design of this component are still under development, analysis of these project components will be done at a programmatic level in the EIR.

In addition to the proposed project, the EIR will evaluate up to two variants to the proposed project that will include the same general types of flood risk reduction and multi-benefit components as those proposed under the proposed project.

ENVIRONMENTAL EFFECTS AND SCOPE OF THE EIR

The EIR will analyze potentially significant impacts that result from construction and operation of the proposed project. Pursuant to section 15063(a) of the CEQA Guidelines, an Initial Study has not been prepared for the proposed project. The EIR will evaluate the full range of environmental issues contemplated for consideration under CEQA and the CEQA Guidelines, as well as non-environmental issues including:

- Aesthetics
- Agricultural
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils and Paleontology
- Greenhouse Gas Emissions, Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise and Vibration
- Public Services
- Population and Housing
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Growth Inducement
- Cumulative Impacts

Environmental issues not contemplated for consideration due to the determination that there will be no impact include:

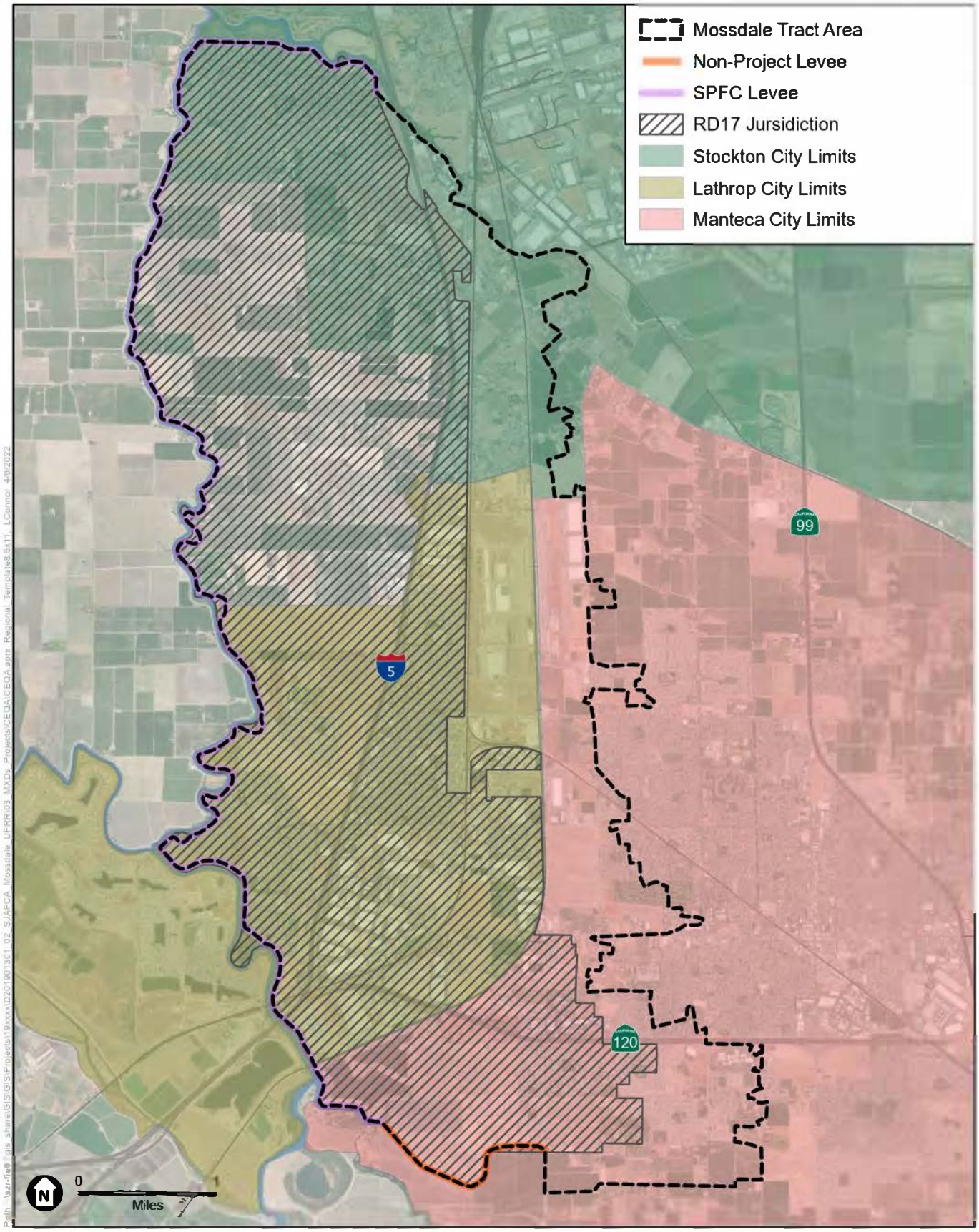
- Forestry Resources

The EIR will identify and evaluate alternatives to the proposed project.

SUBMITTING COMMENTS

Comments and suggestions as to the appropriate scope of analysis in the EIR are invited from all interested parties. Written comments or questions concerning the EIR for the proposed project should be directed to SJAFCA at the following address by 5:00 p.m. on May 23, 2022. Please include the commenter's full name and address.

Chris Elias, Executive Director
SJAFCA,
22 East Weber Avenue, Suite 301
Stockton, CA 95202 Phone (209) 937-7900
Email: Chris.Elias@stocktonca.gov

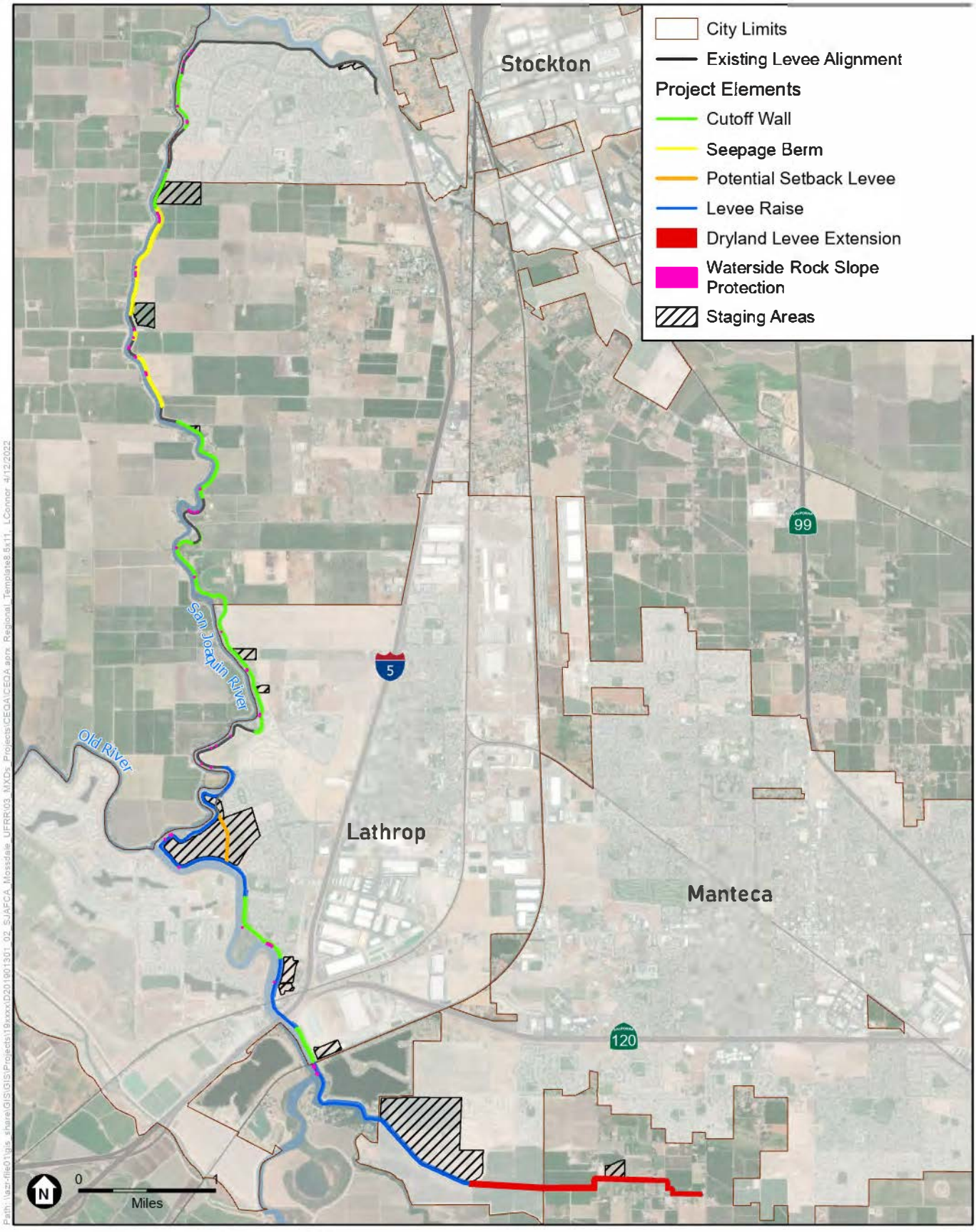


SOURCE: MAXAR, 2021; KSN, 2022; PBI, 2022; ESA, 2022

Mossdale Tract Area Urban Flood Risk Reduction Project

Figure 1
Mossdale Tract Area

ESA



SOURCE: MAXAR, 2021; KSN, 2022; PBI, 2022; ESA, 2022

Mossdale Tract Area Urban Flood Risk Reduction Project

Figure 2
Proposed Project Elements

ESA

OFFICE OF THE DISTRICT 10 DIRECTOR
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May 23, 2022

10-SJ-5-PM Various
Mossdale Tract
Urban Flood Risk Reduction Project
SCH#2022040471

Chris Elias, Executive Director
SJAFCA,
22 East Weber Avenue, Suite 301
Stockton, CA 95202

Dear Mr. Elias:

The California Department of Transportation appreciates the opportunity to review the Notice of Preparation for an Environmental Impact Report for the Mossdale Tract Urban Flood Risk Reduction Project. The proposed project would provide increased public safety benefits by rehabilitating and improving flood management infrastructure to achieve a 200-year Urban Level of Protection for the Mossdale Tract area. The proposed project would include the construction and operation of flood risk reduction and multi-benefit components in and adjacent to the Mossdale Tract area. The flood risk reduction components are fix in place and potential setback levee improvements and the multi-benefit components are ecosystem restoration and recreational features. The Department has the following comments:

1. The applicant needs to ensure that the existing State drainage facilities along and within SR 5 will not be significantly impacted by this project. If historical undeveloped topography shows drainage from the overall Mossdale Tract Area does not flow into the State Right-of-Way, then it will not be allowed to flow into the State Right-of-Way at this time. Additional review may be required should there be any changes to the current proposals or plans that may pose negative impacts to the current State drainage facilities.

2. An Encroachment Permit will be required for work (if any) done within Caltrans's right of way (ROW). This work is subject to the California Environmental Quality Act. Therefore, environmental studies may be required as part of the encroachment permits application. A qualified professional must conduct any such studies undertaken to satisfy Caltrans' environmental review responsibilities. Ground disturbing activities to the site prior to completion and/or approval of required environmental documents may affect Caltrans' ability to issue a permit for the project.

If you have any questions, please contact me at 209-483-2582 or Nicholas Fung at (209) 986-1552.

Sincerely,

Tom Dumas
Chief, Office of Metropolitan Planning

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

JENNIFER LUCCHESI, *Executive Officer*
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May 23, 2022

File Ref: SCH # 2022040471

San Joaquin Area Flood Control Agency
Chris Elias, Executive Director
22 East Weber Avenue, Suite 301
Stockton, CA 95202

VIA REGULAR & ELECTRONIC MAIL (Chris.Elias@stocktonca.gov)

Subject: Notice of Preparation (NOP) for an Environmental Impact Report for Mossdale Tract Area Urban Flood Risk Reduction Project, San Joaquin County

Dear Chris Elias:

The California State Lands Commission (Commission) staff has reviewed the subject NOP for an Environmental Impact Report (EIR) for the Mossdale Tract Area Urban Flood Risk Reduction Project (Project), which is being prepared by the San Joaquin Area Flood Control Agency (Agency). The Agency, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on State sovereign land, the Commission will act as a responsible agency. Commission staff requests that the Agency consult with us on preparation of the Draft EIR as required by CEQA section 21153, subdivision (a), and the State CEQA Guidelines section 15086, subdivisions (a)(1) and (a)(2).

Commission Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the state for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court.

The San Joaquin River (River) and Walthall Slough, at the Project location, are State sovereign land under the Commission's jurisdiction. A lease for the use of State sovereign land will be required from the Commission for any portion of the Project encroaching on State sovereign land.

Project Description

The Agency proposes to provide increased public safety benefits to meet its objectives and needs as follows:

- Improve long-term operations, maintenance, repair, rehabilitation, and replacement over time.
- Modernize the flood risk reduction infrastructure to accommodate future performance and climate change resiliency goals identified in the Central Valley Flood Protection Plan and in Agency's Climate Change Adaptation Policy.
- Implement a multi-benefit flood risk reduction Project that:
    A. Improves ecological function and habitat in the flood-system
    B. Contributes additional societal benefits such as recreation where feasible.

From the Project Description, Commission staff understands that most of the Project components have potential to affect State sovereign land.

Environmental Review

Commission staff requests that the Agency consider the following comments when preparing the EIR to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the EIR to support a future lease approval for the Project.

General Comments

1. Programmatic Document: Because the EIR is being proposed as a programmatic rather than a project-level document, the Commission expects the Project will be presented as a series of distinct but related sequential activities (i.e., proposed actions). The State CEQA Guidelines, section 15168, subdivision (c)(5) states that a program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. To avoid

the improper deferral of mitigation, a common flaw in program-level environmental documents, mitigation measures (MMs) should either be presented as specific, feasible, enforceable obligations, or should be presented as formulas containing "performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way" (State CEQA Guidelines, § 15126.4, subd. (a)). As such, the program EIR should try to distinguish what activities and their MMs are being analyzed in sufficient detail to be covered under the program EIR without additional project specific environmental review, and what activities will trigger the need for additional environmental analysis (see State CEQA Guidelines, § 15168, subd. (c)).

2. Project Description: A thorough and complete Project Description should be included in the EIR to facilitate meaningful environmental review of potential impacts, MMs, and alternatives. The Project Description should be as precise as possible in describing the details of all allowable activities (e.g., types of equipment or methods that may be used, maximum area of impact or volume of sediment removed or disturbed, seasonal work windows, locations for material disposal, etc.), as well as the details of the timing and length of activities. Illustrate on figures and engineering plans and provide written description of activities occurring below the (mean high tide line) for Project area waterways. Please also explain why the Project is proposed on the eastern side of the River levee and not on the western side.

   Thorough descriptions will facilitate Commission staff's determination of the extent and locations of its leasing jurisdiction, make for a more robust analysis of the work that may be performed, and minimize the potential for subsequent environmental analysis to be required.

3. Recreation: Staff requests that the EIR include an analysis responding to the following questions explaining how individuals recreating in and around the River would be impacted by the Project-related activities:

   A. If individuals/communities would be prevented from accessing the River during construction work, how would these individuals/communities be notified in advance?
   B. How would these individuals/communities be identified?
   C. Will there be a website dedicated to upcoming planned work in and around the River where River access could be blocked?
   D. How will this website or another updated source of information be provided to these individuals/communities?
   E. Will there be signs posted with this website address at the usual access points at the River?
   F. Will alternative access points to the River be identified on a map and posted at the River entry points for people to continue to use the River to continue to recreate and take advantage of these recreational and green spaces?

4. Project Objectives and Project Elements: Staff recommends that additional information be provided in the EIR explaining the difference between Project objectives and Project elements listed on NOP page 3.

5. Improving Access for the Disadvantaged Communities: Staff requests that the Project improvements be shown on the latest CalEnviroScreen map to help the readers better understand which communities will be benefitting from the Project objective to implement a multi-benefit flood risk reduction Project that will do the following:

    A. Improves ecological function and habitat in the flood-system

    B. Contributes additional societal benefits such as recreation where feasible.

    This information will help the readers better understand how River access and green spaces near them would be improved so more disadvantaged communities could have access to these beautiful public lands and natural resources which are essential recreational opportunities. Please see Commission's Environmental Justice Policy and commitment to uplifting historically disadvantaged communities at https://www.slc.ca.gov/environmental-justice/.

6. Multi-Benefit Project Components: Staff requests that the EIR analysis include what criteria would be used to decide where these multi-benefit Project components would be located. Would the latest CalEnviroScreen be part of this criteria to consciously increase access to nature and green spaces in the CalEnviroScreen red and orange areas? Staff requests that Project improvement maps be shown in the EIR with the CalEnviroScreen percentiles.

7. EIR Scope: Staff recommends that any geologic faults, subsidence, and any other local concerns be analyzed in the EIR along with other resource areas listed on NOP page 5.

Biological Resources

8. Sensitive Species: For land under the Commission's jurisdiction, the EIR should disclose and analyze all potentially significant effects on sensitive species and habitats in and around the Project area, including special-status wildlife, fish, and plants, and if appropriate, identify feasible MMs to reduce those impacts. The Agency should conduct queries of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database and U.S. Fish and Wildlife Service's (USFWS) Special Status Species Database to identify any special-status plant or wildlife species that may occur in the Project area. The EIR should also include a discussion of consultation with the CDFW, USFWS, and National Marine Fisheries Service (NMFS) as applicable, including any recommended MMs and potentially required permits identified by these agencies.

9. Invasive Species: One of the major stressors in California waterways is introduced species. Therefore, the EIR should consider the Project's potential to encourage the establishment or proliferation of aquatic invasive species such as the quagga mussel, or other nonindigenous, invasive species including aquatic and terrestrial

plants. For example, construction boats and barges brought in from long stays at distant projects may transport new species to the Project area via vessel biofouling, wherein marine and aquatic organisms attach to and accumulate on the hull and other submerged parts of a vessel. If the analysis in the EIR finds potentially significant aquatic invasive species impacts, possible mitigation could include contracting vessels and barges from nearby or requiring contractors to perform a certain degree of vessel cleaning. The CDFW's Invasive Species Program and Commission Marine Invasive Species Program could assist with this analysis as well as with the development of appropriate mitigation (information at https://www.wildlife.ca.gov/Conservation/Invasives and https://www.slc.ca.gov/misp/).

10. Construction Noise: The EIR should also evaluate noise and vibration impacts on fish and birds from construction, restoration, or flood control activities in the water, on the levees, and for land-side supporting structures. MMs could include species-specific work windows as defined by CDFW, USFWS, and NMFS. Again, staff recommends early consultation with these agencies to minimize the impacts of the Project on sensitive species.

Climate Change

11. Greenhouse Gas (GHG): A GHG emissions analysis consistent with the California Global Warming Solutions Act (Assembly Bill [AB] 32; Nuñez, Chapter 488, Statutes of 2006) and required by the State CEQA Guidelines should be included in the EIR. This analysis should identify a threshold for significance for GHG emissions, calculate the level of GHGs that will be emitted because of construction and ultimate build-out of the Project, determine the significance of the impacts of those emissions, and, if impacts are significant, identify MMs that would reduce them to the extent feasible.

12. Sea Level Rise: Staff recommends the EIR include green alternatives and not just supplementing riprap rock slope protections since this Project is in the Bay Delta region with expected sea level rise impacts. Riprap rock slope is not a green long-term solution with expected issues like eliminating vegetation along the levees, safety, liability, and ongoing maintenance to prevent or reduce erosion.

Cultural Resources

13. Submerged Resources: The EIR should evaluate potential impacts to submerged cultural resources in the Project area. The Commission maintains a shipwrecks database that can assist with this analysis. Commission staff requests that the Agency contact Staff Attorney Jamie Garrett (see contact information below) to obtain shipwrecks data from the database and Commission records for the Project site. The database includes known and potential vessels located on the State's tide and submerged lands; however, the locations of many shipwrecks remain unknown. Please note that any submerged archaeological site or submerged historic resource

that has remained in state waters for more than 50 years is presumed to be significant.

Because of this possibility, please add a MMs requiring that in the event cultural resources are discovered during any construction activities, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action.

14. Title to Resources: The EIR should also mention that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the California State Lands Commission (Pub. Resources Code, § 6313). Commission staff requests that the Agency consult with Staff Attorney Jamie Garrett, should any cultural resources on state lands be discovered during construction of the proposed Project.

    In addition, Staff requests that the following statement be included in the EIR's Mitigation and Monitoring Plan: "The final disposition of archaeological, historical, and paleontological resources recovered on State sovereign land under the jurisdiction of the California State Lands Commission must be approved by the Commission."

Mitigation and Alternatives

15. Deferred Mitigation: To avoid the improper deferral of mitigation, MMs must be specific, feasible, and fully enforceable to minimize significant adverse impacts from a project, and "shall not be deferred until some future time." (State CEQA Guidelines, §15126.4, subd. (a)). For example, references to preparing a specific plan to reduce an impact, without calling out the specific activities that will be included in the plan to reduce that impact to a less than significant level, is considered deferral. Commission staff requests that more specific information be provided in such MMs to demonstrate how the MM is going to mitigate potential significant impacts to less than significant.

16. Alternatives: In addition to describing MMs that would avoid or reduce the potentially significant impacts of the Project, the Agency should identify and analyze a range of reasonable alternatives to the proposed Project that would attain most of the Project objectives while avoiding or reducing one or more of the potentially significant impacts (see State CEQA Guidelines, § 15126.6).

Thank you for the opportunity to comment on the NOP for the Project. As a trustee and responsible agency, Commission staff requests that you consult with us on this Project and keep us advised of changes to the Project Description and all other important developments. Please send additional information on the Project to the Commission staff listed below as the EIR is being prepared.

Please refer questions concerning environmental review to Afifa Awan, Senior Environmental Scientist, at Afifa.Awan@slc.ca.gov or (916) 574-1891. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Jamie Garrett, Staff Attorney, at Jamie.Garrett@slc.ca.gov or (916) 574-0398. For questions concerning Commission leasing jurisdiction, please contact Ninette Lee, Public Land Manager, at Ninette.Lee@slc.ca.gov or (916) 574-1869.

Sincerely,

Nicole Dobroski, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
A. Awan, Commission
J. Fabel, Commission
J. Garrett, Commission
N. Lee, Commission
Y. Ramirez, Commission

Central Valley Regional Water Quality Control Board

23 May 2022

Chris Elias
San Joaquin Area Flood Control Agency
22 East Weber Avenue, Suite 301
Stockton, CA 95202
Chris.Elias@stocktonca.gov

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION PROJECT, SCH#2022040471, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 21 April 2022 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Mossdale Tract Area Urban Flood Risk Reduction Project, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has

adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations
All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit
Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the

State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification
If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State
If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit
If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage

under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit
If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit
If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Type text here

Peter Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

DELTA PROTECTION COMMISSION
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CA Department of Food and Agriculture

Wade Crowfoot
CA Natural Resources Agency

Brian Bugsch
CA State Lands Commission

Ex Officio Members

Honorable Susan Eggman
California State Senate

Honorable Carlos Villapudua
California State Assembly

May 13, 2022

Chris Elias, Executive Director
San Joaquin Area Flood Control Agency
22 East Weber Avenue, Suite 301
Stockton, CA 95202

Re: Notice of Preparation of an Environmental Impact Report for the Mossdale Tract Area Urban Flood Risk Reduction Project (SCH 2022040471)

Dear Mr. Elias:

Thank you for providing the Delta Protection Commission (Commission) the opportunity to review the Notice of Preparation of an Environmental Impact Report (EIR) for the Mossdale Tract Area Urban Flood Risk Reduction Project (Project). The Project involves construction and operation of fix in place and potential levee setback improvements to State Plan of Flood Control (SPFC) levees and a non-SPFC dryland levee in and adjacent to the Mossdale Tract area. The Project also includes two multi-benefit components – ecosystem restoration located on undeveloped land on the water side of the levee system, and recreational features, including recreational paths, along the top of levee and landside toe.

The Commission is a state agency charged with ensuring orderly, balanced conservation and development of Delta land resources and improved flood protection. Proposed local government projects within the primary zone of the Legal Delta must be consistent with the Commission's Land Use and Resource Management Plan (LURMP). Although the Project does not fall within the Commission's jurisdiction over "development" in the primary zone, we submit these comments under Public Resource Code Section 29770(d). This section states that the Commission may comment on projects that impact the primary zone.

We also submit these comments pursuant to Public Resource Code Sections 5852-5855 (The Great California Delta Trail Act). This statute directs the Commission to develop and adopt a plan and implementation program for a continuous regional recreational corridor extending throughout the five Delta Counties linking the San Francisco Bay Trail system to the Sacramento River trails. The Commission recently approved the final Great California Delta Trail Master Plan.

The Commission supports projects that provide needed flood protection and stability for the Delta levee system and restore natural habitat while minimizing impacts on agricultural uses. The EIR should include review of the Project for compliance with LURMP policies, particularly those related to the conversion of agricultural land to wildlife habitat and use of public lands for restoration. In addition, the Project should employ the Delta Stewardship Council's Good Neighbor Checklist and other best management practices to minimize impacts on surrounding residents, properties, and agricultural operations. Commission staff can work with SJAFCA on possible locations for

the trails and other recreational features described as part of the Project for potential incorporation into the Great Delta Trail system, if desired.

Thank you for the opportunity to provide input. Please contact Kirsten Pringle, Senior Environmental Planner, at (530) 650-6327 for any questions regarding the comments provided.

Sincerely,

Erik Vink
Executive Director

cc: Chuck Winn, San Joaquin County Board of Supervisors and Commission Vice Chair

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May 23, 2022

Chris Elias, Executive Director

San Joaquin Area Flood Control Agency

22 East Weber Avenue, Suite 301
Stockton, CA 95202

Delivered via email: Chris.Elias@stocktonca.gov

RE: Comments on Notice of Preparation of an Environmental Impact Report for the Mossdale Tract Area Urban Flood Risk Reduction Project, SCH# 2022040471

Dear Chris Elias:

Thank you for the opportunity to review and comment on the Mossdale Tract Area Urban Flood Risk Reduction Project, Notice of Preparation (NOP) of an Environmental Impact Report (EIR). The Delta Stewardship Council (Council) understands that the objective of the Mossdale Tract Area Urban Flood Risk Reduction Project (project), as described in the NOP, is to provide increased public safety through levee rehabilitation and improvements while implementing a multi-benefit risk reduction project that improves ecological function and habitat in the flood system, and contributes societal benefits such as recreation when feasible.

The Council is an independent state agency established by the Sacramento-San Joaquin Delta Reform Act of 2009, codified in Division 35 of the California Water Code, sections 85000-85350 (Delta Reform Act). The Delta Reform Act charges the Council with furthering California's coequal goals of providing a more reliable water

supply and protecting, restoring, and enhancing the Sacramento-San Joaquin River Delta (Delta) ecosystem. (Wat. Code, § 85054.) The Delta Reform Act further states that the coequal goals are to be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. The Council is charged with furthering California's coequal goals for the Delta through the adoption and implementation of the Delta Plan. (Wat. Code, § 85300.)

Pursuant to the Delta Reform Act, the Council has adopted the Delta Plan, a comprehensive long-term management plan for the Delta and Suisun Marsh that furthers the coequal goals. The Delta Plan contains regulatory policies, which are set forth in California Code of Regulations, Title 23, sections 5001-5015. Through the Delta Reform Act, the Council was granted specific regulatory and appellate authority over certain actions of State or local public agencies that take place in whole or in part in the Delta. (Wat. Code, §§ 85210, 85225.30.) A state or local agency that proposes to undertake a covered action is required to prepare a written Certification of Consistency with detailed findings as to whether the covered action is consistent with the Delta Plan and submit that certification to the Council prior to implementation of the project. (Wat. Code, § 85225.)

COVERED ACTION DETERMINATION AND CERTIFICATION OF CONSISTENCY WITH THE DELTA PLAN

Based on the project location and scope, as provided in the NOP, the proposed project appears to meet the definition of a covered action. Water Code section 85057.5(a) states that a covered action is a plan, program, or project, as defined pursuant to Section 21065 of the Public Resources Code that meets all of the following conditions:

> *(1) Will occur, in whole or in part, within the boundaries of the Delta or Suisun Marsh.* The project is located within the legal Delta.
>
> *(2) Will be carried out, approved, or funded by a State or a local public agency.* The project will be carried out by the San Joaquin Area Flood Control Agency (SJAFCA), a local public agency.
>
> *(3) Is covered by one of the provisions of the Delta Plan.* Delta Plan regulatory policies that may apply to the project are discussed below.
>
> *And*

> *(4) Will have a significant impact on achievement of one or both of the coequal goals or the implementation of government-sponsored flood control programs to reduce risks to people, property, and State interests in the Delta.* The project would have a significant impact on the coequal goal of protecting, restoring, and enhancing the Delta ecosystem, and a significant impact on a government-sponsored flood control program to reduce risks to people, property, and State interests in the Delta.

The State or local agency approving, funding, or carrying out the project must determine if that project is a covered action and, if so, file a Certification of Consistency with the Council prior to initiating project implementation. (Wat. Code, § 85225; Cal. Code Regs., tit. 23, § 5001(j)(3).)

COMMENTS REGARDING DELTA PLAN POLICIES AND POTENTIAL CONSISTENCY CERTIFICATION

The following section describes the Delta Plan regulatory policies that may apply to the proposed project based on the available information in the NOP. This information is offered to assist SJAFCA to prepare environmental documents that could be used to support a future Certification of Consistency for the project.

General Policy 1: Detailed Findings to Establish Consistency with the Delta Plan

Delta Plan Policy **G P1** (Cal. Code Regs., tit. 23, § 5002) specifies what must be addressed in a Certification of Consistency for a project that is a covered action. If a future Certification of Consistency is prepared for the project, it must include detailed findings that address each of the following requirements:

Mitigation Measures

Delta Plan Policy **G P1(b)(2)** (Cal. Code Regs., tit. 23, § 5002(b)(2)) requires that covered actions not exempt from the California Environmental Quality Act (CEQA) must include all applicable feasible mitigation measures adopted and incorporated into the Delta Plan as amended April 26, 2018 (unless the measures are within the exclusive jurisdiction of an agency other than the agency that files the Certification of Consistency), or substitute mitigation measures that the agency finds are equally or more effective. These mitigation measures are identified in Delta Plan Appendix O and are

available at: https://deltacouncil.ca.gov/pdf/delta-plan/2018-appendix-o-mitigation-monitoring-and-reporting-program.pdf.

If the Mossdale Tract Area Urban Flood Risk Reduction Project EIR identifies potentially significant impacts that require mitigation, SJAFCA should review Appendix O and include all applicable feasible mitigation measures adopted and incorporated into the Delta Plan or identify substitute mitigation measures that the agency finds are equally or more effective.

Best Available Science

Delta Plan Policy **G P1(b)(3)** (Cal. Code Regs., tit. 23, § 5002(b)(3)) states that actions subject to Delta Plan regulations must document use of best available science as relevant to the purpose and nature of the project. The Delta Plan defines best available science as "the best scientific information and data for informing management and policy decisions." (Cal. Code Regs, tit. 23, § 5001 (f).) Best available science is also required to be consistent with the guidelines and criteria in Appendix 1A of the Delta Plan (https://deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1a.pdf). In a future Certification of Consistency for the project, SJAFCA should identify how project design and operational decisions were informed by best available science.

Adaptive Management

Delta Plan Policy **G P1(b)(4)** (Cal. Code Regs., tit. 23, § 5002(b)(4)) requires that ecosystem restoration and water management covered actions include adequate provisions for continued implementation of adaptive management, appropriate to the scope of the action. This requirement is satisfied through a) the development of an adaptive management plan that is consistent with the framework described in Appendix 1 B of the Delta Plan (https://deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1b.pdf), and b) documentation of adequate resources to implement the proposed adaptive management plan. A future Certification of Consistency for the project should include an adaptive management plan consistent with the framework established in Appendix 1B.

Ecosystem Restoration Policy 2: Restore Habitats at Appropriate Elevations

Delta Plan Policy **ER P2** (Cal. Code Regs., tit. 23, § 5006) requires habitat restoration to be carried out consistent with Appendix 3 (available within Appendix B:

https://deltacouncil.ca.gov/pdf/delta-plan/2013-appendix-b-combined.pdf). The elevation map included as Figure 4-6 (https://deltacouncil.ca.gov/pdf/delta-plan/figure-4-6-habitat-types-based-on-elevation.pdf) and Appendix 4 of the Delta Plan should be used as a guide for determining appropriate habitat restoration actions based on an area's elevation.

In the EIR, SJAFCA should identify the elevation of the project site in relation to current water levels and projected sea level rise based on best available science, and document how proposed habitat restoration actions are appropriate for these elevations.

Ecosystem Restoration Policy 4: Expand Floodplains and Riparian Habitats in Levee Projects

Delta Plan Policy **ER P4** (Cal. Code Regs., tit. 23, § 5008) requires levee projects to evaluate and, where feasible incorporate, alternatives to increase floodplains and riparian habitats. The EIR should document how SJAFCA evaluated the feasibility of incorporating floodplain and riparian habitats into the design and construction of the project.

Ecosystem Restoration Policy 5: Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species

Delta Plan Policy **ER P5** (Cal. Code Regs., tit. 23, § 5009) requires that covered actions fully consider and avoid or mitigate the potential for new introductions of, or improved habitat conditions for, nonnative invasive species, striped bass, or bass in a way that appropriately protects the ecosystem. The proposed setback levee at River Mile (RM) 52 has potential to create aquatic habitat that could increase predation for threatened or endangered fish species.

SJAFCA should acknowledge ER P5 in the Biological Resources section of the EIR. The EIR should describe how the Mossdale Tract Area Urban Flood Risk Reduction Project will address both nonnative wildlife species as well as terrestrial and aquatic weeds. The EIR should analyze how the project will avoid or mitigate for conditions that would lead to establishment of nonnative invasive species. In the event that mitigation is warranted, mitigation and minimization measures must include Delta Plan Mitigation Measure 4-1 (available at: https://deltacouncil.ca.gov/pdf/delta-plan/2018-appendix-o-mitigation-monitoring-and-reporting-program.pdf) or substitute equally or more effective measures.

Delta as Place Policy 2: Respect Local Land Use when Siting Water or Flood Facilities or Restoring Habitats

Delta Plan Policy **DP P2** (Cal. Code Regs., tit. 23, § 5011) reflects one of the Delta Plan's charges to protect the Delta as an evolving place by siting water management facilities, ecosystem restoration, and flood management infrastructure to avoid or reduce conflicts with existing or planned future uses when feasible, considering comments from local agencies and the Delta Protection Commission.

The proposed project includes a variety of sites identified for ecosystem restoration and a potential setback levee. SJAFCA should acknowledge DP P2 in the regulatory setting for the Land Use and Planning section of the EIR. The EIR should describe the project process to avoid or reduce conflicts with existing or planned future uses.

Risk Reduction Policy 1: Prioritization of State Investments in Delta Levees and Risk Reduction

Delta Plan Policy **RR P1** (Cal. Code Regs., tit. 23, § 5012) calls for the prioritization of State investments in Delta flood risk management, including levee operation, maintenance, and improvements. The project seeks to improve public safety to urban areas, providing 200-year level of flood protection through levee rehabilitation and improvements. The EIR should document how SJAFCA has incorporated the prioritization of the state investments in Delta levees and risk reduction.

Risk Reduction Policy 4: Floodplain Protection

Delta Plan Policy **RR P4** (Cal. Code Regs., tit. 23, § 5015) states that no encroachment shall be allowed or constructed in the floodplain in certain areas within the legal Delta, unless it can be demonstrated by appropriate analysis that the encroachment will not have a significant adverse impact on floodplain values and functions. One area specified in RR P4 is the Lower San Joaquin River Floodplain Bypass area, located on the Lower San Joaquin River upstream of

Stockton immediately southwest of Paradise Cut on lands both upstream and downstream of the Interstate 5 crossing.[1]

While the project as proposed would not construct encroachments in the Lower San Joaquin Bypass Area, SJAFCA should consider this policy if the preferred alternative approved by the agency includes project features in this area. SJAFCA should acknowledge RR P4 in the regulatory setting for the Hazards and/or the Hydrology section(s) of the EIR. The EIR should analyze the impact of the proposed project on floodplain values and functions, and a future Certification of Consistency should identify if the project is consistent with Policy RR P4.

CLOSING COMMENTS

As SJAFCA proceeds with design, development, and environmental impact analysis of the project, the Council invites SJAFCA to engage Council staff in early consultation (prior to submittal of a Certification of Consistency) to discuss project features and mitigation measures that would promote consistency with the Delta Plan.

More information on covered actions, early consultation, and the certification process can be found on the Council website, https://coveredactions.deltacouncil.ca.gov. Council staff are available to discuss issues outlined in this letter as SJAFCA proceeds with its project and approval processes. Please contact Erin Mullin at (916) 902-6482 or Erin.Mullin@deltacouncil.ca.gov with any questions.

Sincerely,



Jeff Henderson, AICP
Deputy Executive Officer
Delta Stewardship Council

[1] This area is described in the Lower San Joaquin River Floodplain Bypass Proposal, submitted to the California Department of Water Resources by the partnership of the South Delta Water Agency, the River Islands Development Company, Reclamation District 2062, San Joaquin Resource Conservation District, American Rivers, the American Lands Conservancy, and the Natural Resources Defense Council, March 2011.

STATE OF CALIFORNIA — Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

San Joaquin Area Flood Control Agency
SJAFCA
MAY 09 2022
Received

April 27, 2022

Chris Elias, Executive Director
San Joaquin Area Flood Control Agency
22 East Weber Avenue, Suite 301
Stockton, CA 95202

Re: 2022040471, Mossdale Tract Area Urban Flood Risk Reduction Project, San Joaquin County

Dear Mr. Elias:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Received
MAY 09 2022
San Joaquin Area Flood Control Agency

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Luiseño

VICE CHAIRPERSON
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AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   a. A brief description of the project.
   b. The lead agency contact information.
   c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
   d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
   a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   a. Alternatives to the project.
   b. Recommended mitigation measures.
   c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.
   d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
   b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

cc: State Clearinghouse

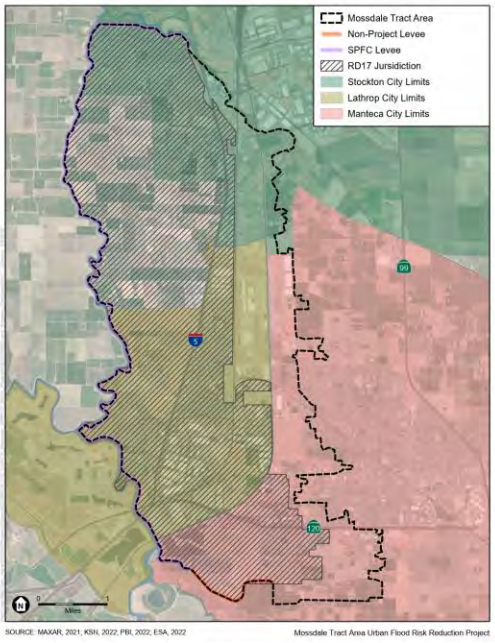
SIERRA CLUB
DELTA-SIERRA GROUP
MOTHER LODE CHAPTER

Chris Elias, Executive Director
SJAFCA,
22 East Weber Avenue, Suite 301
Stockton, CA 95202 Phone (209) 937-7900
Email: Chris.Elias@stocktonca.gov

5.23.2022

Re: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR THE MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION PROJECT

Thank you for the opportunity to review the Notice of Preparation of an environmental impact report for the Mossdale Tract urban flood reduction project which includes jurisdictional lands of the Cities of Stockton, Lathrop, and Manteca as well as unincorporated San Joaquin County as shown on the right.



The area flooded within Reclamation Districts 404 and 17, as well as upstream of the Mossdale Tract in 1997 had reported damages of approximately $89 million. However, in the ensuing years, development within the Mossdale Tract boundary has occurred. If a similar flood is repeated considerable more damage would result.

The Federal Emergency Management Agency (FEMA) has initiated a modernization program and levee recertification which is based on new and more stringent levee standards. The environmental impact report should include a full explanation of this program along with analysis about how this improved levee analysis will be affected by the proposed project.

According to the Notice of Preparation, the proposed project would include construction between 2025 and 2028 and operation of flood risk reduction and multi-benefit components in and adjacent to the Mossdale Tract area including:

1. Fix in place and potential levee setback improvements with habitat enhancement and revegetation
2. Dryland levee extension
3. Ecosystem restoration at multiple sites
4. Recreational features along the levee system

Please include analysis of required land use zoning restrictions which may be necessary if the proposed project is to be implemented, along with the other factors identified in the Notice of Preparation, including projected climate changes. Please clearly identify the parcels adjacent to the Mossdale Tract that are affected by the proposed project. Additionally, please include an analysis of ongoing maintenance costs.

Please send notice to mebeth@outlook.com when the project draft environmental impact report is available to review.

Sincerely,

MElth

Mary Elizabeth M.S., R.E.H.S.
Delta Sierra Group Conservation Chair, Sierra Club
PO Box 4848, Stockton CA 95204

A-1 Form Letter

The City of Sacramento received 77 form letters from members of the public in response to the Notice of Preparation (NOP) for the proposed project, filed on April 6, 2022. Because these letters were identical to one another, only one representative form letter has been included in this appendix to the EIR. Below is a full list of names of those who submitted form letters in response to the proposed project's NOP:

Raymond Azevedo, Barbara M. Becker, John Becker, May Belle Vincent, Luis Brizuela, Joe Cambra, Jerry Campbell, Carol Campbell, Margie Cambra, Johnnie Ray Cardoza, Eddy Cardoza , Tony Cardoza Jr., Gary Crannell, Wayne Cummings, Shirley Gallaghen, Rudney Gomes, Jennifer Gomes, Whisper Gray , Davis Gray, Brian Gray, Sandra L. Harp , Pat Hofman, Sally A. Holden, Gary Holden, Rita M. Huber, Gregory A. Huber, Roseline A. Kothlin, Delaine Leary, Darla Lehman, William Scott Long, David Lowry, Allison Lowry, Beatrice Luis, Michael Lyions, Llyoyd Mackey, Aaron Mackey, Bill W. Mahaffey, Pearl Meredith, Justin Meredith, Jamie Meredith, Dustan Meredith, Carol Moberly, Steven M. Moberly Sr. , Betty Morgado, Nelson Morgado Sr. , Glen Muller, Randy Neto, Danielle Neto, Mark V. Pfeifle, Marla J. Pfeifle, Sue Quaresma, Raymond Quaresma, Katelyn Quaresma, Marian J. Rawlins, Shawn Rawlins, Anthony Risso, Herman C. Robertson, Arnold Rothlin, Courtney Settle, Amy Rothlin Settle, Tom Teicheira, Richard Teicheira, Michael Teicheira, Kris B. Thomas, Patricia Uecker, Gary Lee Uecker, Bruce D. Vincent, Sharon Van Zwaluwenburg, John Van Zwaluwenburg, Dolores Wackerly, Carl Wackerly, Vanessa Weeks, Scott Weeks, Virginia Wertman, Andrew R. Wertman, Raeanne Yamada

May 18, 2022
San Joaquin Area Flood Control Agency
ATTENTION Chris Elias
22 East Weber Avenue Suite 301
Stockton, CA 95202

RE NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR THE MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION PROJECT

In regards to the above-mentioned Notice, I as an External Stakeholder who will be adversely affected by the placement of Reclamation District 17's Dry Land Levee Extension, disagree with the over-reach of this project by San Joaquin Area Flood Control Agency, (SJAFCA). The placement of the Dry Land Levee, as it is shown in SJAFCA's proposal, will create new and additional flooding in the area south of its placement. To the north of the Dry Land Levee, with the use of slurry walls, there is the ever-present danger of disrupting the flow of ground water to those with wells and agriculture. In addition, there remains the ever present danger of an additional three feet of floodwaters to areas previously flooded and flood waters to those not previously flooded. With Nile Garden School being approximately a half-mile (1/2 mile) to the south near the corner of Nile and Union Road, there is the danger of additional floodwaters reaching the school. (Reference point), during the flood of 1997, floodwaters were within 100 yards of reaching Nile Garden School.

Every project has stakeholders and those stakeholders are divided into two groups:

Internal Stakeholders are those who are within the organization. The project directly benefits from them. (Cities, Government Planning, Bank, Developers etc.).

External Stakeholders are those people who are outside of the organization and are indirectly impacted by the project. They do not benefit from this instead they are DIRECTLY EFFECTED BY THE PROJECT.

Respectfully Submitted

Signed Raymond Azevedo
External Stakeholder

Print name Raymond Azevedo

Address: 21520 S. Olcander AV
Manteca Ca. 95337

Email address

Appendix B

Air Quality, Energy Fuel Use, GHG Modeling

B-1 CalEEMod Outputs

Ecosystem Restoration Sitestion Sites

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Haul and Vendor trips
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.91	0.39	26.3	6.34	0.15	0.43	6.03	6.46	0.43	1.65	2.07	—	22,148	22,148	0.36	3.50	51.7	23,252
Mit.	0.91	0.39	26.3	6.34	0.15	0.43	6.03	6.46	0.43	1.65	2.07	—	22,148	22,148	0.36	3.50	51.7	23,252
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.88	0.36	28.0	6.46	0.15	0.43	6.06	6.49	0.43	1.65	2.08	—	22,162	22,162	0.36	3.51	1.34	23,218
Mit.	0.88	0.36	28.0	6.46	0.15	0.43	6.06	6.49	0.43	1.65	2.08	—	22,162	22,162	0.36	3.51	1.34	23,218
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.05	3.27	0.76	0.02	0.05	0.72	0.77	0.05	0.20	0.25	—	2,640	2,640	0.04	0.42	2.64	2,768
Mit.	0.11	0.05	3.27	0.76	0.02	0.05	0.72	0.77	0.05	0.20	0.25	—	2,640	2,640	0.04	0.42	2.64	2,768
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.01	0.60	0.14	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	437	437	0.01	0.07	0.44	458
Mit.	0.02	0.01	0.60	0.14	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	437	437	0.01	0.07	0.44	458
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.91	0.39	26.3	6.34	0.15	0.43	6.03	6.46	0.43	1.65	2.07	—	22,148	22,148	0.36	3.50	51.7	23,252
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.88	0.36	28.0	6.46	0.15	0.43	6.06	6.49	0.43	1.65	2.08	—	22,162	22,162	0.36	3.51	1.34	23,218
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.05	3.27	0.76	0.02	0.05	0.72	0.77	0.05	0.20	0.25	—	2,640	2,640	0.04	0.42	2.64	2,768
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.01	0.60	0.14	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	437	437	0.01	0.07	0.44	458

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.91	0.39	26.3	6.34	0.15	0.43	6.03	6.46	0.43	1.65	2.07	—	22,148	22,148	0.36	3.50	51.7	23,252

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.88	0.36	28.0	6.46	0.15	0.43	6.06	6.49	0.43	1.65	2.08	—	22,162	22,162	0.36	3.51	1.34	23,218
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.05	3.27	0.76	0.02	0.05	0.72	0.77	0.05	0.20	0.25	—	2,640	2,640	0.04	0.42	2.64	2,768
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.01	0.60	0.14	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	437	437	0.01	0.07	0.44	458

3. Construction Emissions Details

3.1. ID 13- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.07	29.1
Hauling	0.45	0.20	13.1	3.16	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,046	11,046	0.18	1.75	25.8	11,597
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.97	2.97	< 0.005	< 0.005	< 0.005	3.11
Hauling	0.05	0.02	1.46	0.34	0.01	0.02	0.32	0.34	0.02	0.09	0.11	—	1,181	1,181	0.02	0.19	1.18	1,238
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.51
Hauling	0.01	< 0.005	0.27	0.06	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	195	195	< 0.005	0.03	0.20	205

3.2. ID 13- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.07	29.1
Hauling	0.45	0.20	13.1	3.16	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,046	11,046	0.18	1.75	25.8	11,597

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.97	2.97	< 0.005	< 0.005	< 0.005	3.11
Hauling	0.05	0.02	1.46	0.34	0.01	0.02	0.32	0.34	0.02	0.09	0.11	—	1,181	1,181	0.02	0.19	1.18	1,238
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.51
Hauling	0.01	< 0.005	0.27	0.06	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	195	195	< 0.005	0.03	0.20	205

3.3. ID 14- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.07	29.1
Hauling	0.45	0.20	13.1	3.16	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,046	11,046	0.18	1.75	25.8	11,597
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	< 0.005	29.1
Hauling	0.44	0.18	14.0	3.22	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,053	11,053	0.18	1.75	0.67	11,580
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.51	2.51	< 0.005	< 0.005	< 0.005	2.63

Hauling	0.04	0.02	1.24	0.29	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	999	999	0.02	0.16	1.00	1,047
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.01	< 0.005	0.23	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	165	165	< 0.005	0.03	0.17	173

3.4. ID 14- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.07	29.1
Hauling	0.45	0.20	13.1	3.16	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,046	11,046	0.18	1.75	25.8	11,597
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	< 0.005	29.1
Hauling	0.44	0.18	14.0	3.22	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,053	11,053	0.18	1.75	0.67	11,580
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.51	2.51	< 0.005	< 0.005	< 0.005	2.63
Hauling	0.04	0.02	1.24	0.29	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	999	999	0.02	0.16	1.00	1,047
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.01	< 0.005	0.23	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	165	165	< 0.005	0.03	0.17	173

3.5. ID 16- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	< 0.005	29.1
Hauling	0.44	0.18	14.0	3.22	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,053	11,053	0.18	1.75	0.67	11,580
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.20
Hauling	0.02	0.01	0.56	0.13	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	454	454	0.01	0.07	0.45	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.2	75.2	< 0.005	0.01	0.08	78.8

3.6. ID 16- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	< 0.005	29.1
Hauling	0.44	0.18	14.0	3.22	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,053	11,053	0.18	1.75	0.67	11,580
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.20
Hauling	0.02	0.01	0.56	0.13	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	454	454	0.01	0.07	0.45	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.2	75.2	< 0.005	0.01	0.08	78.8

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 13- Clearing and grubbing	Site Preparation	4/9/2026	6/2/2026	5.00	39.0	—
ID 14- Clearing and grubbing	Site Preparation	3/20/2026	5/5/2026	5.00	33.0	—
ID 16- Clearing and grubbing	Site Preparation	3/9/2026	3/29/2026	5.00	15.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	1.00	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	161	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	1.00	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	161	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	1.00	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	161	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	0.00	11.9	LDA,LDT1,LDT2

ID 13- Clearing and grubbing	Vendor	1.00	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	161	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	1.00	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	161	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	1.00	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	161	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 13- Clearing and grubbing	—	25,833	140	0.00	—
ID 14- Clearing and grubbing	—	25,833	70.0	0.00	—
ID 16- Clearing and grubbing	—	25,833	25.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Road reconstruction
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.89	1.59	12.7	20.5	0.03	0.61	0.71	1.32	0.56	0.09	0.65	—	3,200	3,200	0.13	0.03	0.37	3,212
Mit.	0.35	0.35	2.29	22.2	0.03	0.06	0.71	0.77	0.06	0.09	0.15	—	3,200	3,200	0.13	0.03	0.37	3,212
% Reduced	81%	78%	82%	-8%	—	90%	—	42%	90%	—	77%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.90	1.60	12.7	20.5	0.03	0.61	0.66	1.27	0.56	0.09	0.65	—	3,214	3,214	0.13	0.03	0.01	3,226
Mit.	0.36	0.36	2.31	22.2	0.03	0.06	0.66	0.72	0.06	0.09	0.15	—	3,214	3,214	0.13	0.03	0.01	3,226
% Reduced	81%	78%	82%	-8%	—	90%	—	43%	90%	—	77%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.06	0.45	0.72	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.02	—	114	114	< 0.005	< 0.005	0.01	114
Mit.	0.01	0.01	0.08	0.79	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	114	114	< 0.005	< 0.005	0.01	114
% Reduced	81%	78%	82%	-8%	—	90%	—	44%	90%	—	78%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.08	0.13	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	< 0.005	18.9
Mit.	< 0.005	< 0.005	0.01	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	< 0.005	18.9
% Reduced	81%	78%	82%	-8%	—	90%	—	44%	90%	—	78%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.89	1.59	12.7	20.5	0.03	0.61	0.71	1.32	0.56	0.09	0.65	—	3,200	3,200	0.13	0.03	0.37	3,212
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.90	1.60	12.7	20.5	0.03	0.61	0.66	1.27	0.56	0.09	0.65	—	3,214	3,214	0.13	0.03	0.01	3,226
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07	0.06	0.45	0.72	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.02	—	114	114	< 0.005	< 0.005	0.01	114
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01	0.01	0.08	0.13	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	< 0.005	18.9

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.35	0.35	2.29	22.2	0.03	0.06	0.71	0.77	0.06	0.09	0.15	—	3,200	3,200	0.13	0.03	0.37	3,212

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.36	0.36	2.31	22.2	0.03	0.06	0.66	0.72	0.06	0.09	0.15	—	3,214	3,214	0.13	0.03	0.01	3,226
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01	0.01	0.08	0.79	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	114	114	< 0.005	< 0.005	0.01	114
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.01	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	< 0.005	18.9

3. Construction Emissions Details

3.1. ID 13- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	1.54	12.6	19.9	0.03	0.61	—	0.61	0.56	—	0.56	—	3,091	3,091	0.13	0.03	—	3,102
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.21	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.5	65.5	< 0.005	< 0.005	0.01	66.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 13- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	2.26	21.6	0.03	0.06	—	0.06	0.06	—	0.06	—	3,091	3,091	0.13	0.03	—	3,102
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.5	65.5	< 0.005	< 0.005	0.01	66.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 14- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	1.54	12.6	19.9	0.03	0.61	—	0.61	0.56	—	0.56	—	3,091	3,091	0.13	0.03	—	3,102
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.21	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 14- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	2.26	21.6	0.03	0.06	—	0.06	0.06	—	0.06	—	3,091	3,091	0.13	0.03	—	3,102
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 16- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	1.54	12.6	19.9	0.03	0.61	—	0.61	0.56	—	0.56	—	3,091	3,091	0.13	0.03	—	3,102
Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.47	8.47	< 0.005	< 0.005	—	8.50
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.40	1.40	< 0.005	< 0.005	—	1.41
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 16- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.30	0.30	2.26	21.6	0.03	0.06	—	0.06	0.06	—	0.06	—	3,091	3,091	0.13	0.03	—	3,102
Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.47	8.47	< 0.005	< 0.005	—	8.50
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.40	1.40	< 0.005	< 0.005	—	1.41
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 13- Clearing and grubbing	Building Construction	12/4/2026	12/13/2026	5.00	6.00	—
ID 14- Clearing and grubbing	Building Construction	11/24/2026	12/1/2026	5.00	6.00	—
ID 16- Clearing and grubbing	Building Construction	5/6/2026	5/6/2026	5.00	1.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 13- Clearing and grubbing	Rubber Tired Loaders	Diesel	Average	1.00	10.0	150	0.36
ID 13- Clearing and grubbing	Graders	Diesel	Average	2.00	10.0	148	0.41
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 14- Clearing and grubbing	Rubber Tired Loaders	Diesel	Average	1.00	10.0	150	0.36

ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Graders	Diesel	Average	2.00	10.0	148	0.41
ID 16- Clearing and grubbing	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 16- Clearing and grubbing	Rubber Tired Loaders	Diesel	Average	1.00	10.0	150	0.36
ID 16- Clearing and grubbing	Graders	Diesel	Average	2.00	10.0	148	0.41
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 13- Clearing and grubbing	Rubber Tired Loaders	Diesel	Tier 4 Final	1.00	10.0	150	0.36
ID 13- Clearing and grubbing	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 14- Clearing and grubbing	Rubber Tired Loaders	Diesel	Tier 4 Final	1.00	10.0	150	0.36
ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 16- Clearing and grubbing	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38

ID 16- Clearing and grubbing	Rubber Tired Loaders	Diesel	Tier 4 Final	1.00	10.0	150	0.36
ID 16- Clearing and grubbing	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	8.00	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	15.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	8.00	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	15.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 13- Clearing and grubbing	2,967	0.00	7.50	0.00	—
ID 14- Clearing and grubbing	2,967	0.00	7.50	0.00	—
ID 16- Clearing and grubbing	2,967	0.00	1.25	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Revegetation
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.43	2.93	16.7	29.5	0.06	0.54	1.29	1.83	0.50	0.30	0.80	—	8,041	8,041	0.30	0.10	4.75	8,084
Mit.	1.30	1.25	5.14	43.5	0.06	0.13	1.29	1.41	0.13	0.30	0.43	—	8,041	8,041	0.30	0.10	4.75	8,084
% Reduced	62%	57%	69%	-47%	—	77%	—	23%	75%	—	47%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.83	2.38	16.3	22.6	0.06	0.54	0.10	0.64	0.50	0.02	0.52	—	6,754	6,754	0.27	0.06	0.01	6,778
Mit.	0.70	0.69	4.79	36.6	0.06	0.13	0.10	0.23	0.13	0.02	0.15	—	6,754	6,754	0.27	0.06	0.01	6,778
% Reduced	75%	71%	71%	-62%	—	77%	—	65%	75%	—	72%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.79	0.67	4.18	6.50	0.02	0.14	0.20	0.33	0.13	0.05	0.17	—	1,874	1,874	0.07	0.02	0.31	1,883
Mit.	0.26	0.25	1.27	10.0	0.02	0.03	0.20	0.23	0.03	0.05	0.08	—	1,874	1,874	0.07	0.02	0.31	1,883
% Reduced	68%	63%	70%	-54%	—	77%	—	32%	75%	—	55%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.12	0.76	1.19	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	—	310	310	0.01	< 0.005	0.05	312
Mit.	0.05	0.05	0.23	1.83	< 0.005	0.01	0.04	0.04	0.01	0.01	0.01	—	310	310	0.01	< 0.005	0.05	312
% Reduced	68%	63%	70%	-54%	—	77%	—	32%	75%	—	55%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.43	2.93	16.7	29.5	0.06	0.54	1.29	1.83	0.50	0.30	0.80	—	8,041	8,041	0.30	0.10	4.75	8,084
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.83	2.38	16.3	22.6	0.06	0.54	0.10	0.64	0.50	0.02	0.52	—	6,754	6,754	0.27	0.06	0.01	6,778
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.79	0.67	4.18	6.50	0.02	0.14	0.20	0.33	0.13	0.05	0.17	—	1,874	1,874	0.07	0.02	0.31	1,883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.14	0.12	0.76	1.19	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	—	310	310	0.01	< 0.005	0.05	312

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.30	1.25	5.14	43.5	0.06	0.13	1.29	1.41	0.13	0.30	0.43	—	8,041	8,041	0.30	0.10	4.75	8,084

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.70	0.69	4.79	36.6	0.06	0.13	0.10	0.23	0.13	0.02	0.15	—	6,754	6,754	0.27	0.06	0.01	6,778
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.26	0.25	1.27	10.0	0.02	0.03	0.20	0.23	0.03	0.05	0.08	—	1,874	1,874	0.07	0.02	0.31	1,883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.05	0.05	0.23	1.83	< 0.005	0.01	0.04	0.04	0.01	0.01	0.01	—	310	310	0.01	< 0.005	0.05	312

3. Construction Emissions Details

3.1. ID 13- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.78	2.33	16.3	22.2	0.06	0.54	—	0.54	0.50	—	0.50	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.40	0.33	2.32	3.16	0.01	0.08	—	0.08	0.07	—	0.07	—	948	948	0.04	0.01	—	951
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	0.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	157	157	0.01	< 0.005	—	158
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.60	0.39	7.37	0.00	0.00	1.29	1.29	0.00	0.30	0.30	—	1,386	1,386	0.03	0.05	4.75	1,406
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.85	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	183	183	< 0.005	0.01	0.29	186
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.3	30.3	< 0.005	< 0.005	0.05	30.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 13- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.65	4.76	36.1	0.06	0.13	—	0.13	0.13	—	0.13	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.68	5.15	0.01	0.02	—	0.02	0.02	—	0.02	—	948	948	0.04	0.01	—	951
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	157	157	0.01	< 0.005	—	158
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.60	0.39	7.37	0.00	0.00	1.29	1.29	0.00	0.30	0.30	—	1,386	1,386	0.03	0.05	4.75	1,406
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.85	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	183	183	< 0.005	0.01	0.29	186
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.3	30.3	< 0.005	< 0.005	0.05	30.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 14- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.78	2.33	16.3	22.2	0.06	0.54	—	0.54	0.50	—	0.50	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.89	1.21	< 0.005	0.03	—	0.03	0.03	—	0.03	—	365	365	0.01	< 0.005	—	366
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.16	0.22	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	60.4	60.4	< 0.005	< 0.005	—	60.6
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.87	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	163	163	< 0.005	0.01	0.56	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.28	8.28	< 0.005	< 0.005	0.01	8.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 14- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.65	4.76	36.1	0.06	0.13	—	0.13	0.13	—	0.13	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.26	1.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	365	365	0.01	< 0.005	—	366
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	60.4	60.4	< 0.005	< 0.005	—	60.6

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.87	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	163	163	< 0.005	0.01	0.56	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.28	8.28	< 0.005	< 0.005	0.01	8.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 16- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.78	2.33	16.3	22.2	0.06	0.54	—	0.54	0.50	—	0.50	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.78	2.33	16.3	22.2	0.06	0.54	—	0.54	0.50	—	0.50	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.89	1.21	< 0.005	0.03	—	0.03	0.03	—	0.03	—	365	365	0.01	< 0.005	—	366
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.16	0.22	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	60.4	60.4	< 0.005	< 0.005	—	60.6
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.2	98.2	< 0.005	< 0.005	0.01	99.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.52	5.52	< 0.005	< 0.005	0.01	5.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 16- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.65	4.76	36.1	0.06	0.13	—	0.13	0.13	—	0.13	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.65	4.76	36.1	0.06	0.13	—	0.13	0.13	—	0.13	—	6,656	6,656	0.27	0.05	—	6,678
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.26	1.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	365	365	0.01	< 0.005	—	366

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	60.4	60.4	< 0.005	< 0.005	—	60.6
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.2	98.2	< 0.005	< 0.005	0.01	99.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.52	5.52	< 0.005	< 0.005	0.01	5.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 13- Clearing and grubbing	Site Preparation	7/21/2026	9/30/2026	5.00	52.0	—

ID 14- Clearing and grubbing	Site Preparation	5/6/2026	6/2/2026	5.00	20.0	—
ID 16- Clearing and grubbing	Site Preparation	3/30/2026	4/25/2026	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Off-Highway Trucks	Diesel	Average	3.00	10.0	376	0.38
ID 13- Clearing and grubbing	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Off-Highway Trucks	Diesel	Average	3.00	10.0	376	0.38
ID 14- Clearing and grubbing	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 16- Clearing and grubbing	Off-Highway Trucks	Diesel	Average	3.00	10.0	376	0.38
ID 16- Clearing and grubbing	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	10.0	376	0.38

ID 13- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	10.0	376	0.38
ID 14- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40
ID 16- Clearing and grubbing	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	10.0	376	0.38
ID 16- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	153	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	18.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT

ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	153	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	18.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction

Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 13- Clearing and grubbing	—	0.00	0.00	0.00	—
ID 14- Clearing and grubbing	—	0.00	0.00	0.00	—
ID 16- Clearing and grubbing	—	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2026	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Berm removal
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.04	1.72	15.3	17.7	0.04	0.65	0.62	1.26	0.60	0.08	0.67	—	3,994	3,994	0.16	0.04	0.37	4,009
Mit.	0.44	0.44	3.43	22.8	0.04	0.07	0.62	0.69	0.07	0.08	0.15	—	3,994	3,994	0.16	0.04	0.37	4,009
% Reduced	78%	75%	78%	-29%	—	89%	—	45%	88%	—	77%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.07	0.59	0.68	< 0.005	0.02	0.02	0.05	0.02	< 0.005	0.03	—	153	153	0.01	< 0.005	0.01	153
Mit.	0.02	0.02	0.13	0.87	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	0.01	—	153	153	0.01	< 0.005	0.01	153
% Reduced	79%	75%	78%	-29%	—	89%	—	45%	88%	—	77%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.11	0.12	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	25.3	25.3	< 0.005	< 0.005	< 0.005	25.4
Mit.	< 0.005	< 0.005	0.02	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.3	25.3	< 0.005	< 0.005	< 0.005	25.4
% Reduced	79%	75%	78%	-29%	—	89%	—	45%	88%	—	77%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.04	1.72	15.3	17.7	0.04	0.65	0.62	1.26	0.60	0.08	0.67	—	3,994	3,994	0.16	0.04	0.37	4,009
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.08	0.07	0.59	0.68	< 0.005	0.02	0.02	0.05	0.02	< 0.005	0.03	—	153	153	0.01	< 0.005	0.01	153
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01	0.01	0.11	0.12	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	25.3	25.3	< 0.005	< 0.005	< 0.005	25.4

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.44	0.44	3.43	22.8	0.04	0.07	0.62	0.69	0.07	0.08	0.15	—	3,994	3,994	0.16	0.04	0.37	4,009
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.02	0.13	0.87	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	0.01	—	153	153	0.01	< 0.005	0.01	153
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.02	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.3	25.3	< 0.005	< 0.005	< 0.005	25.4

3. Construction Emissions Details

3.1. ID 13- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.67	15.3	17.1	0.04	0.65	—	0.65	0.60	—	0.60	—	3,885	3,885	0.16	0.03	—	3,899
Dust From Material Movement	—	—	—	—	—	—	0.52	0.52	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.59	0.66	< 0.005	0.02	—	0.02	0.02	—	0.02	—	149	149	0.01	< 0.005	—	150
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.11	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.7	24.7	< 0.005	< 0.005	—	24.8
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.86	3.86	< 0.005	< 0.005	0.01	3.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 13- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	3.40	22.3	0.04	0.07	—	0.07	0.07	—	0.07	—	3,885	3,885	0.16	0.03	—	3,899
Dust From Material Movement	—	—	—	—	—	—	0.52	0.52	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.13	0.85	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	149	149	0.01	< 0.005	—	150
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.7	24.7	< 0.005	< 0.005	—	24.8
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.86	3.86	< 0.005	< 0.005	0.01	3.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 13- Clearing and grubbing	Building Construction	7/1/2026	7/20/2026	5.00	14.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 13- Clearing and grubbing	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 13- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 13- Clearing and grubbing	Other Construction Equipment	Diesel	Average	2.00	10.0	82.0	0.42

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 13- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38

ID 13- Clearing and grubbing	Tractors/Loaders/Back	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 13- Clearing and grubbing	Other Construction Equipment	Diesel	Tier 4 Final	2.00	10.0	82.0	0.42

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	0.00	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%

Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 13- Clearing and grubbing	0.00	0.00	140	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

5.18. Vegetation

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Site grading
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.0	28.6	257	253	0.54	10.4	45.7	56.1	9.57	20.6	30.2	—	59,008	59,008	2.37	0.50	3.20	59,221
Mit.	6.68	6.52	39.0	307	0.54	1.27	45.7	47.0	1.26	20.6	21.9	—	59,008	59,008	2.37	0.50	3.20	59,221
% Reduced	80%	77%	85%	-22%	—	88%	—	16%	87%	—	28%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.9	28.5	257	251	0.54	10.4	45.8	56.2	9.57	20.6	30.2	—	58,771	58,771	2.37	0.50	0.07	58,980
Mit.	6.58	6.42	39.0	306	0.54	1.27	45.8	47.0	1.26	20.6	21.9	—	58,771	58,771	2.37	0.50	0.07	58,980
% Reduced	81%	77%	85%	-22%	—	88%	—	16%	87%	—	28%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.04	3.40	30.6	29.9	0.06	1.24	5.44	6.68	1.14	2.46	3.60	—	7,014	7,014	0.28	0.06	0.15	7,039
Mit.	0.79	0.77	4.65	36.5	0.06	0.15	5.44	5.59	0.15	2.46	2.61	—	7,014	7,014	0.28	0.06	0.15	7,039
% Reduced	81%	77%	85%	-22%	—	88%	—	16%	87%	—	28%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.74	0.62	5.58	5.46	0.01	0.23	0.99	1.22	0.21	0.45	0.66	—	1,161	1,161	0.05	0.01	0.02	1,165
Mit.	0.14	0.14	0.85	6.66	0.01	0.03	0.99	1.02	0.03	0.45	0.48	—	1,161	1,161	0.05	0.01	0.02	1,165
% Reduced	81%	77%	85%	-22%	—	88%	—	16%	87%	—	28%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	34.0	28.6	257	253	0.54	10.4	45.7	56.1	9.57	20.6	30.2	—	59,008	59,008	2.37	0.50	3.20	59,221
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	33.9	28.5	257	251	0.54	10.4	45.8	56.2	9.57	20.6	30.2	—	58,771	58,771	2.37	0.50	0.07	58,980
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.04	3.40	30.6	29.9	0.06	1.24	5.44	6.68	1.14	2.46	3.60	—	7,014	7,014	0.28	0.06	0.15	7,039
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.74	0.62	5.58	5.46	0.01	0.23	0.99	1.22	0.21	0.45	0.66	—	1,161	1,161	0.05	0.01	0.02	1,165

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.68	6.52	39.0	307	0.54	1.27	45.7	47.0	1.26	20.6	21.9	—	59,008	59,008	2.37	0.50	3.20	59,221

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.58	6.42	39.0	306	0.54	1.27	45.8	47.0	1.26	20.6	21.9	—	58,771	58,771	2.37	0.50	0.07	58,980
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.79	0.77	4.65	36.5	0.06	0.15	5.44	5.59	0.15	2.46	2.61	—	7,014	7,014	0.28	0.06	0.15	7,039
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.14	0.14	0.85	6.66	0.01	0.03	0.99	1.02	0.03	0.45	0.48	—	1,161	1,161	0.05	0.01	0.02	1,165

3. Construction Emissions Details

3.1. ID 14- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	16.8	14.1	128	124	0.27	5.20	—	5.20	4.79	—	4.79	—	29,038	29,038	1.18	0.24	—	29,137
Dust From Material Movement	—	—	—	—	—	—	22.4	22.4	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	16.8	14.1	128	124	0.27	5.20	—	5.20	4.79	—	4.79	—	29,038	29,038	1.18	0.24	—	29,137
Dust From Material Movement	—	—	—	—	—	—	22.4	22.4	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	1.27	11.6	11.2	0.02	0.47	—	0.47	0.43	—	0.43	—	2,625	2,625	0.11	0.02	—	2,634
Dust From Material Movement	—	—	—	—	—	—	2.03	2.03	—	0.92	0.92	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	2.12	2.04	< 0.005	0.09	—	0.09	0.08	—	0.08	—	435	435	0.02	< 0.005	—	436
Dust From Material Movement	—	—	—	—	—	—	0.37	0.37	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.15	2.89	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	543	543	0.01	0.02	1.86	551

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.19	2.29	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	491	491	0.01	0.02	0.05	498
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.5	45.5	< 0.005	< 0.005	0.07	46.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.54	7.54	< 0.005	< 0.005	0.01	7.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 14- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	3.06	19.4	151	0.27	0.64	—	0.64	0.63	—	0.63	—	29,038	29,038	1.18	0.24	—	29,137

Dust From Material Movement	—	—	—	—	—	—	22.4	22.4	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	3.06	19.4	151	0.27	0.64	—	0.64	0.63	—	0.63	—	29,038	29,038	1.18	0.24	—	29,137
Dust From Material Movement	—	—	—	—	—	—	22.4	22.4	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	1.75	13.7	0.02	0.06	—	0.06	0.06	—	0.06	—	2,625	2,625	0.11	0.02	—	2,634
Dust From Material Movement	—	—	—	—	—	—	2.03	2.03	—	0.92	0.92	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.32	2.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	435	435	0.02	< 0.005	—	436

Dust From Material Movement	—	—	—	—	—	—	0.37	0.37	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.15	2.89	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	543	543	0.01	0.02	1.86	551
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.19	2.29	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	491	491	0.01	0.02	0.05	498
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.5	45.5	< 0.005	< 0.005	0.07	46.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.54	7.54	< 0.005	< 0.005	0.01	7.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 16- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	16.8	14.1	128	124	0.27	5.20	—	5.20	4.79	—	4.79	—	29,038	29,038	1.18	0.24	—	29,137
Dust From Material Movement	—	—	—	—	—	—	22.6	22.6	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.27	5.09	0.01	0.21	—	0.21	0.20	—	0.20	—	1,193	1,193	0.05	0.01	—	1,197
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.42	0.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.96	0.93	< 0.005	0.04	—	0.04	0.04	—	0.04	—	198	198	0.01	< 0.005	—	198

Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.95	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	205	205	0.01	0.01	0.02	207
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.62	8.62	< 0.005	< 0.005	0.01	8.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 16- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	3.06	19.4	151	0.27	0.64	—	0.64	0.63	—	0.63	—	29,038	29,038	1.18	0.24	—	29,137
Dust From Material Movement	—	—	—	—	—	—	22.6	22.6	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.80	6.21	0.01	0.03	—	0.03	0.03	—	0.03	—	1,193	1,193	0.05	0.01	—	1,197
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.42	0.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	1.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	198	198	0.01	< 0.005	—	198
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.08	0.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.95	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	205	205	0.01	0.01	0.02	207
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.62	8.62	< 0.005	< 0.005	0.01	8.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 13- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	16.8	14.1	128	124	0.27	5.20	—	5.20	4.79	—	4.79	—	29,038	29,038	1.18	0.24	—	29,137
Dust From Material Movement	—	—	—	—	—	—	22.4	22.4	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.79	1.51	13.7	13.2	0.03	0.56	—	0.56	0.51	—	0.51	—	3,103	3,103	0.13	0.03	—	3,113
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	1.09	1.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.27	2.50	2.41	0.01	0.10	—	0.10	0.09	—	0.09	—	514	514	0.02	< 0.005	—	515
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.11	2.07	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	389	389	0.01	0.01	1.34	395
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.6	38.6	< 0.005	< 0.005	0.06	39.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.38	6.38	< 0.005	< 0.005	0.01	6.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 13- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	3.06	19.4	151	0.27	0.64	—	0.64	0.63	—	0.63	—	29,038	29,038	1.18	0.24	—	29,137

Dust From Material Movement	—	—	—	—	—	—	22.4	22.4	—	10.2	10.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.33	2.07	16.2	0.03	0.07	—	0.07	0.07	—	0.07	—	3,103	3,103	0.13	0.03	—	3,113
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	1.09	1.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.38	2.95	0.01	0.01	—	0.01	0.01	—	0.01	—	514	514	0.02	< 0.005	—	515
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.11	2.07	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	389	389	0.01	0.01	1.34	395

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.6	38.6	< 0.005	< 0.005	0.06	39.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.38	6.38	< 0.005	< 0.005	0.01	6.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 14- Clearing and grubbing	Grading	3/20/2026	5/5/2026	5.00	33.0	—
ID 16- Clearing and grubbing	Grading	3/9/2026	3/29/2026	5.00	15.0	—
ID 13- Clearing and grubbing	Grading	4/9/2026	6/2/2026	5.00	39.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 14- Clearing and grubbing	Scrapers	Diesel	Average	6.00	10.0	423	0.48
ID 14- Clearing and grubbing	Rubber Tired Dozers	Diesel	Average	6.00	10.0	367	0.40
ID 14- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	6.00	10.0	84.0	0.37
ID 14- Clearing and grubbing	Excavators	Diesel	Average	4.00	10.0	36.0	0.38
ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Pumps	Diesel	Average	3.00	10.0	11.0	0.74
ID 16- Clearing and grubbing	Scrapers	Diesel	Average	6.00	10.0	423	0.48
ID 16- Clearing and grubbing	Rubber Tired Dozers	Diesel	Average	6.00	10.0	367	0.40

ID 16- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	6.00	10.0	84.0	0.37
ID 16- Clearing and grubbing	Excavators	Diesel	Average	4.00	10.0	36.0	0.38
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 16- Clearing and grubbing	Pumps	Diesel	Average	3.00	10.0	11.0	0.74
ID 13- Clearing and grubbing	Scrapers	Diesel	Average	6.00	10.0	423	0.48
ID 13- Clearing and grubbing	Rubber Tired Dozers	Diesel	Average	6.00	10.0	367	0.40
ID 13- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	6.00	10.0	84.0	0.37
ID 13- Clearing and grubbing	Excavators	Diesel	Average	4.00	10.0	36.0	0.38
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 13- Clearing and grubbing	Pumps	Diesel	Average	3.00	10.0	11.0	0.74

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 14- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	6.00	10.0	423	0.48
ID 14- Clearing and grubbing	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	10.0	367	0.40
ID 14- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	10.0	84.0	0.37
ID 14- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	4.00	10.0	36.0	0.38
ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40

ID 14- Clearing and grubbing	Pumps	Diesel	Average	3.00	10.0	11.0	0.74
ID 16- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	6.00	10.0	423	0.48
ID 16- Clearing and grubbing	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	10.0	367	0.40
ID 16- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	10.0	84.0	0.37
ID 16- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	4.00	10.0	36.0	0.38
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40
ID 16- Clearing and grubbing	Pumps	Diesel	Average	3.00	10.0	11.0	0.74
ID 13- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	6.00	10.0	423	0.48
ID 13- Clearing and grubbing	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	10.0	367	0.40
ID 13- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	10.0	84.0	0.37
ID 13- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	4.00	10.0	36.0	0.38
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40
ID 13- Clearing and grubbing	Pumps	Diesel	Average	3.00	10.0	11.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	43.0	11.9	LDA,LDT1,LDT2

ID 13- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	60.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	25.0	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	43.0	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	60.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	25.0	11.9	LDA,LDT1,LDT2

ID 16- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 14- Clearing and grubbing	—	169,867	70.0	0.00	—
ID 16- Clearing and grubbing	—	169,867	25.0	0.00	—
ID 13- Clearing and grubbing	—	169,867	140	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Clearing and Grubbing
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.30	5.31	47.8	54.3	0.12	1.96	2.39	4.35	1.80	0.30	2.10	—	13,569	13,569	0.54	0.12	1.09	13,619
Mit.	1.41	1.40	7.25	74.7	0.12	0.25	2.39	2.64	0.25	0.30	0.55	—	13,569	13,569	0.54	0.12	1.09	13,619
% Reduced	78%	74%	85%	-37%	—	87%	—	39%	86%	—	74%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.9	15.9	143	162	0.37	5.88	7.33	13.2	5.41	0.91	6.32	—	40,617	40,617	1.64	0.36	0.08	40,765
Mit.	4.21	4.17	21.8	223	0.37	0.75	7.33	8.08	0.75	0.91	1.66	—	40,617	40,617	1.64	0.36	0.08	40,765
% Reduced	78%	74%	85%	-38%	—	87%	—	39%	86%	—	74%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.81	0.68	6.15	6.96	0.02	0.25	0.31	0.56	0.23	0.04	0.27	—	1,744	1,744	0.07	0.02	0.06	1,751
Mit.	0.18	0.18	0.94	9.58	0.02	0.03	0.31	0.34	0.03	0.04	0.07	—	1,744	1,744	0.07	0.02	0.06	1,751
% Reduced	78%	74%	85%	-38%	—	87%	—	39%	86%	—	74%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	0.12	1.12	1.27	< 0.005	0.05	0.06	0.10	0.04	0.01	0.05	—	289	289	0.01	< 0.005	0.01	290
Mit.	0.03	0.03	0.17	1.75	< 0.005	0.01	0.06	0.06	0.01	0.01	0.01	—	289	289	0.01	< 0.005	0.01	290
% Reduced	78%	74%	85%	-38%	—	87%	—	39%	86%	—	74%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.30	5.31	47.8	54.3	0.12	1.96	2.39	4.35	1.80	0.30	2.10	—	13,569	13,569	0.54	0.12	1.09	13,619
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	18.9	15.9	143	162	0.37	5.88	7.33	13.2	5.41	0.91	6.32	—	40,617	40,617	1.64	0.36	0.08	40,765
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.81	0.68	6.15	6.96	0.02	0.25	0.31	0.56	0.23	0.04	0.27	—	1,744	1,744	0.07	0.02	0.06	1,751
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.15	0.12	1.12	1.27	< 0.005	0.05	0.06	0.10	0.04	0.01	0.05	—	289	289	0.01	< 0.005	0.01	290

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.41	1.40	7.25	74.7	0.12	0.25	2.39	2.64	0.25	0.30	0.55	—	13,569	13,569	0.54	0.12	1.09	13,619

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.21	4.17	21.8	223	0.37	0.75	7.33	8.08	0.75	0.91	1.66	—	40,617	40,617	1.64	0.36	0.08	40,765
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.18	0.18	0.94	9.58	0.02	0.03	0.31	0.34	0.03	0.04	0.07	—	1,744	1,744	0.07	0.02	0.06	1,751
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.03	0.03	0.17	1.75	< 0.005	0.01	0.06	0.06	0.01	0.01	0.01	—	289	289	0.01	< 0.005	0.01	290

3. Construction Emissions Details

3.1. ID 13- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.16	5.17	47.7	52.7	0.12	1.96	—	1.96	1.80	—	1.80	—	13,252	13,252	0.54	0.11	—	13,298
Dust From Material Movement	—	—	—	—	—	—	2.10	2.10	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	6.16	5.17	47.7	52.7	0.12	1.96	—	1.96	1.80	—	1.80	—	13,252	13,252	0.54	0.11	—	13,298
Dust From Material Movement	—	—	—	—	—	—	2.10	2.10	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.66	4.04	0.01	0.15	—	0.15	0.14	—	0.14	—	1,017	1,017	0.04	0.01	—	1,020
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.67	0.74	< 0.005	0.03	—	0.03	0.03	—	0.03	—	168	168	0.01	< 0.005	—	169
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.09	1.69	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	317	317	0.01	0.01	1.09	322

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.33	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	0.01	0.01	0.03	290
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.5	22.5	< 0.005	< 0.005	0.04	22.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	0.01	3.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 13- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26	1.26	7.16	73.0	0.12	0.25	—	0.25	0.25	—	0.25	—	13,252	13,252	0.54	0.11	—	13,298

Dust From Material Movement	—	—	—	—	—	—	2.10	2.10	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26	1.26	7.16	73.0	0.12	0.25	—	0.25	0.25	—	0.25	—	13,252	13,252	0.54	0.11	—	13,298
Dust From Material Movement	—	—	—	—	—	—	2.10	2.10	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.55	5.60	0.01	0.02	—	0.02	0.02	—	0.02	—	1,017	1,017	0.04	0.01	—	1,020
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	1.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	168	168	0.01	< 0.005	—	169

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.09	1.69	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	317	317	0.01	0.01	1.09	322
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.33	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	0.01	0.01	0.03	290
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.5	22.5	< 0.005	< 0.005	0.04	22.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	0.01	3.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 14- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.16	5.17	47.7	52.7	0.12	1.96	—	1.96	1.80	—	1.80	—	13,252	13,252	0.54	0.11	—	13,298
Dust From Material Movement	—	—	—	—	—	—	2.12	2.12	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.83	2.02	< 0.005	0.08	—	0.08	0.07	—	0.07	—	508	508	0.02	< 0.005	—	510
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.33	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	84.2	84.2	< 0.005	< 0.005	—	84.4

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.33	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	0.01	0.01	0.03	290
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.86	1.86	< 0.005	< 0.005	< 0.005	1.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 14- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26	1.26	7.16	73.0	0.12	0.25	—	0.25	0.25	—	0.25	—	13,252	13,252	0.54	0.11	—	13,298
Dust From Material Movement	—	—	—	—	—	—	2.12	2.12	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.27	2.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	508	508	0.02	< 0.005	—	510
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	84.2	84.2	< 0.005	< 0.005	—	84.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.33	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	0.01	0.01	0.03	290
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.86	1.86	< 0.005	< 0.005	< 0.005	1.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 16- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	6.16	5.17	47.7	52.7	0.12	1.96	—	1.96	1.80	—	1.80	—	13,252	13,252	0.54	0.11	—	13,298
Dust From Material Movement	—	—	—	—	—	—	2.23	2.23	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.07	0.65	0.72	< 0.005	0.03	—	0.03	0.02	—	0.02	—	182	182	0.01	< 0.005	—	182
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.33	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	0.01	0.01	0.03	290
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.02	4.02	< 0.005	< 0.005	0.01	4.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 16- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26	1.26	7.16	73.0	0.12	0.25	—	0.25	0.25	—	0.25	—	13,252	13,252	0.54	0.11	—	13,298

Dust From Material Movement	—	—	—	—	—	—	2.23	2.23	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	1.00	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	182	182	0.01	< 0.005	—	182
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.33	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	0.01	0.01	0.03	290

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.02	4.02	< 0.005	< 0.005	0.01	4.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 13- Clearing and grubbing	Site Preparation	3/2/2026	4/8/2026	5.00	28.0	—
ID 14- Clearing and grubbing	Site Preparation	3/2/2026	3/19/2026	5.00	14.0	—
ID 16- Clearing and grubbing	Site Preparation	3/2/2026	3/8/2026	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Other Construction Equipment	Diesel	Average	4.00	10.0	82.0	0.42
ID 13- Clearing and grubbing	Other General Industrial Equipment	Diesel	Average	1.00	10.0	35.0	0.34
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 13- Clearing and grubbing	Scrapers	Diesel	Average	4.00	10.0	423	0.48
ID 13- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 14- Clearing and grubbing	Other Construction Equipment	Diesel	Average	4.00	10.0	82.0	0.42
ID 14- Clearing and grubbing	Other General Industrial Equipment	Diesel	Average	1.00	10.0	35.0	0.34
ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Scrapers	Diesel	Average	4.00	10.0	423	0.48

ID 14- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 16- Clearing and grubbing	Other Construction Equipment	Diesel	Average	4.00	10.0	82.0	0.42
ID 16- Clearing and grubbing	Other General Industrial Equipment	Diesel	Average	1.00	10.0	35.0	0.34
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	3.00	10.0	93.0	0.40
ID 16- Clearing and grubbing	Scrapers	Diesel	Average	4.00	10.0	423	0.48
ID 16- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 13- Clearing and grubbing	Other Construction Equipment	Diesel	Tier 4 Final	4.00	10.0	82.0	0.42
ID 13- Clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	1.00	10.0	35.0	0.34
ID 13- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40
ID 13- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	4.00	10.0	423	0.48
ID 13- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 14- Clearing and grubbing	Other Construction Equipment	Diesel	Tier 4 Final	4.00	10.0	82.0	0.42
ID 14- Clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	1.00	10.0	35.0	0.34
ID 14- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40
ID 14- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	4.00	10.0	423	0.48

ID 14- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 16- Clearing and grubbing	Other Construction Equipment	Diesel	Tier 4 Final	4.00	10.0	82.0	0.42
ID 16- Clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	1.00	10.0	35.0	0.34
ID 16- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	3.00	10.0	93.0	0.40
ID 16- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	4.00	10.0	423	0.48
ID 16- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	35.0	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	35.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	35.0	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT

ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 13- Clearing and grubbing	—	—	—	—
ID 13- Clearing and grubbing	Worker	35.0	11.9	LDA,LDT1,LDT2
ID 13- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 13- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 13- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 14- Clearing and grubbing	—	—	—	—
ID 14- Clearing and grubbing	Worker	35.0	11.9	LDA,LDT1,LDT2
ID 14- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 14- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 14- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 16- Clearing and grubbing	—	—	—	—
ID 16- Clearing and grubbing	Worker	35.0	11.9	LDA,LDT1,LDT2
ID 16- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 16- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 16- Clearing and grubbing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 13- Clearing and grubbing	—	25,833	140	0.00	—
ID 14- Clearing and grubbing	—	25,833	70.0	0.00	—
ID 16- Clearing and grubbing	—	25,833	25.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

Flood Risk Reduction Components Components

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- ID 9
Construction Start Date	11/17/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.19	4.38	36.3	45.9	0.10	1.57	11.8	13.0	1.44	4.64	5.70	—	11,044	11,044	0.44	0.10	0.90	11,086
Mit.	1.15	1.15	6.10	61.8	0.10	0.20	11.8	12.0	0.20	4.64	4.78	—	11,044	11,044	0.44	0.10	0.90	11,086
% Reduced	78%	74%	83%	-35%	—	87%	—	8%	86%	—	16%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.27	1.91	15.6	16.0	0.03	0.63	0.75	1.05	0.58	0.09	0.66	—	3,252	3,252	0.13	0.04	0.03	3,264
Mit.	0.90	0.80	5.45	19.0	0.03	0.18	0.75	0.81	0.17	0.09	0.25	—	3,252	3,252	0.13	0.04	0.03	3,264
% Reduced	60%	58%	65%	-19%	—	71%	—	23%	71%	—	62%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.58	0.49	3.96	4.46	0.01	0.16	0.86	1.02	0.15	0.28	0.43	—	1,028	1,028	0.04	0.01	0.08	1,032
Mit.	0.16	0.15	0.89	5.45	0.01	0.03	0.86	0.89	0.03	0.28	0.31	—	1,028	1,028	0.04	0.01	0.08	1,032
% Reduced	71%	68%	78%	-22%	—	82%	—	13%	81%	—	28%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.72	0.81	< 0.005	0.03	0.16	0.19	0.03	0.05	0.08	—	170	170	0.01	< 0.005	0.01	171
Mit.	0.03	0.03	0.16	0.99	< 0.005	0.01	0.16	0.16	0.01	0.05	0.06	—	170	170	0.01	< 0.005	0.01	171
% Reduced	71%	68%	78%	-22%	—	82%	—	13%	81%	—	28%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	5.19	4.38	36.3	45.9	0.10	1.57	11.8	13.0	1.44	4.64	5.70	—	11,044	11,044	0.44	0.10	0.90	11,086
2029	0.48	0.41	3.66	7.02	0.01	0.09	0.10	0.19	0.09	0.02	0.11	—	1,076	1,076	0.04	0.01	0.27	1,080
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	2.27	1.91	15.6	16.0	0.03	0.63	0.35	0.98	0.58	0.08	0.66	—	3,060	3,060	0.12	0.04	0.03	3,074
2029	1.41	1.19	7.78	13.8	0.03	0.30	0.75	1.05	0.28	0.09	0.37	—	3,252	3,252	0.13	0.03	0.01	3,264
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.58	0.49	3.96	4.46	0.01	0.16	0.86	1.02	0.15	0.28	0.43	—	1,028	1,028	0.04	0.01	0.08	1,032
2029	0.05	0.05	0.35	0.63	< 0.005	0.01	0.02	0.03	0.01	< 0.005	0.01	—	121	121	< 0.005	< 0.005	0.01	122
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.11	0.09	0.72	0.81	< 0.005	0.03	0.16	0.19	0.03	0.05	0.08	—	170	170	0.01	< 0.005	0.01	171
2029	0.01	0.01	0.06	0.11	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	20.1	20.1	< 0.005	< 0.005	< 0.005	20.1

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.15	1.15	6.10	61.8	0.10	0.20	11.8	12.0	0.20	4.64	4.78	—	11,044	11,044	0.44	0.10	0.90	11,086
2029	0.14	0.14	1.24	7.27	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,076	1,076	0.04	0.01	0.27	1,080
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.90	0.80	5.45	15.9	0.03	0.18	0.35	0.53	0.17	0.08	0.25	—	3,060	3,060	0.12	0.04	0.03	3,074
2029	0.33	0.33	1.97	19.0	0.03	0.06	0.75	0.81	0.06	0.09	0.15	—	3,252	3,252	0.13	0.03	0.01	3,264
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.16	0.15	0.89	5.45	0.01	0.03	0.86	0.89	0.03	0.28	0.31	—	1,028	1,028	0.04	0.01	0.08	1,032
2029	0.01	0.01	0.09	0.75	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	121	121	< 0.005	< 0.005	0.01	122
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.03	0.03	0.16	0.99	< 0.005	0.01	0.16	0.16	0.01	0.05	0.06	—	170	170	0.01	< 0.005	0.01	171
2029	< 0.005	< 0.005	0.02	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	20.1	20.1	< 0.005	< 0.005	< 0.005	20.1

3. Construction Emissions Details

3.1. Clearing and Grubbing (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.2	44.5	0.10	1.57	—	1.57	1.44	—	1.44	—	10,747	10,747	0.44	0.09	—	10,784

Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.99	1.22	< 0.005	0.04	—	0.04	0.04	—	0.04	—	294	294	0.01	< 0.005	—	295
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.18	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.7	48.7	< 0.005	< 0.005	—	48.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.07	1.42	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	297	297	0.01	0.01	0.85	301

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.55	7.55	< 0.005	< 0.005	0.01	7.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Clearing and Grubbing (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	1.03	6.03	60.4	0.10	0.20	—	0.20	0.20	—	0.20	—	10,747	10,747	0.44	0.09	—	10,784
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	1.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	294	294	0.01	< 0.005	—	295
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.7	48.7	< 0.005	< 0.005	—	48.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.07	1.42	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	297	297	0.01	0.01	0.85	301
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.55	7.55	< 0.005	< 0.005	0.01	7.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Restoration (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	7.76	13.5	0.03	0.30	—	0.30	0.28	—	0.28	—	3,175	3,175	0.13	0.03	—	3,185
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.03	0.03	0.17	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	69.6	69.6	< 0.005	< 0.005	—	69.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.6	77.6	< 0.005	< 0.005	0.01	78.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Restoration (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	69.6	69.6	< 0.005	< 0.005	—	69.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.6	77.6	< 0.005	< 0.005	0.01	78.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Levee Degrade (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.91	3.28	27.5	29.5	0.07	1.16	—	1.16	1.06	—	1.06	—	7,601	7,601	0.31	0.06	—	7,627
Dust From Material Movement	—	—	—	—	—	—	11.5	11.5	—	4.57	4.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.51	1.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	416	416	0.02	< 0.005	—	418
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.27	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	69.0	69.0	< 0.005	< 0.005	—	69.2
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.40	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.10	7.10	< 0.005	< 0.005	0.01	7.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.18	1.18	< 0.005	< 0.005	< 0.005	1.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Levee Degrade (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	3.73	39.7	0.07	0.14	—	0.14	0.14	—	0.14	—	7,601	7,601	0.31	0.06	—	7,627
Dust From Material Movement	—	—	—	—	—	—	11.5	11.5	—	4.57	4.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.20	2.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	416	416	0.02	< 0.005	—	418
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	69.0	69.0	< 0.005	< 0.005	—	69.2

Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.40	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.10	7.10	< 0.005	< 0.005	0.01	7.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.18	1.18	< 0.005	< 0.005	< 0.005	1.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. SB Slurry Wall (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	175	175	< 0.005	0.01	0.50	177
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.01	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.5	31.5	< 0.005	< 0.005	0.04	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.22	5.22	< 0.005	< 0.005	0.01	5.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. SB Slurry Wall (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	175	175	< 0.005	0.01	0.50	177

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.01	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.5	31.5	< 0.005	< 0.005	0.04	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.22	5.22	< 0.005	< 0.005	0.01	5.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Levee Fill (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	1.78	15.5	14.7	0.03	0.63	—	0.63	0.58	—	0.58	—	2,728	2,728	0.11	0.02	—	2,738

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.45	1.37	< 0.005	0.06	—	0.06	0.05	—	0.05	—	254	254	0.01	< 0.005	—	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.26	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.1	42.1	< 0.005	< 0.005	—	42.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.72	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	174	174	< 0.005	0.01	0.01	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	16.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.79

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Levee Fill (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.67	5.34	14.6	0.03	0.18	—	0.18	0.17	—	0.17	—	2,728	2,728	0.11	0.02	—	2,738
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.50	1.36	< 0.005	0.02	—	0.02	0.02	—	0.02	—	254	254	0.01	< 0.005	—	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.1	42.1	< 0.005	< 0.005	—	42.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.72	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	174	174	< 0.005	0.01	0.01	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	16.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Pipe Rehabilitation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.63	6.55	0.01	0.09	—	0.09	0.09	—	0.09	—	974	974	0.04	0.01	—	977

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.97	3.97	< 0.005	< 0.005	—	3.99
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.27	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.35	2.35	< 0.005	< 0.005	< 0.005	2.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Pipe Rehabilitation (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.97	3.97	< 0.005	< 0.005	—	3.99

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.27	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.35	2.35	< 0.005	< 0.005	< 0.005	2.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Rock Slope Protection (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.44	0.37	3.63	6.55	0.01	0.09	—	0.09	0.09	—	0.09	—	974	974	0.04	0.01	—	977
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.1	93.1	< 0.005	< 0.005	0.01	94.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Rock Slope Protection (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977

Architectural Coating	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.1	93.1	< 0.005	< 0.005	0.01	94.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Aggregate Base (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	< 0.005	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.28	8.28	< 0.005	< 0.005	—	8.31
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.37	1.37	< 0.005	< 0.005	—	1.38
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Aggregate Base (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.28	8.28	< 0.005	< 0.005	—	8.31
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.37	1.37	< 0.005	< 0.005	—	1.38
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Clearing and Grubbing	Site Preparation	7/1/2028	7/16/2028	5.00	10.0	—
Site Restoration	Site Preparation	10/19/2029	10/30/2029	5.00	8.00	—
Levee Degrade	Grading	7/31/2028	8/26/2028	5.00	20.0	—
SB Slurry Wall	Building Construction	8/22/2028	11/28/2028	5.00	71.0	—
Levee Fill	Building Construction	10/31/2028	12/15/2028	5.00	34.0	—
Pipe Rehabilitation	Building Construction	7/17/2029	7/29/2029	5.00	9.00	—
Rock Slope Protection	Building Construction	10/1/2029	10/5/2029	5.00	5.00	—
Aggregate Base	Paving	10/8/2029	10/9/2029	5.00	2.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Clearing and Grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
Clearing and Grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
Clearing and Grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
Clearing and Grubbing	Other Construction Equipment	Diesel	Average	2.00	10.0	82.0	0.42
Clearing and Grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
Clearing and Grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37

Site Restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
Site Restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
Site Restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Site Restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Levee Degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
Levee Degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Levee Degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
Levee Degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
Levee Fill	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
Levee Fill	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
Levee Fill	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
Levee Fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
Levee Fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Pipe Rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
Pipe Rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Pipe Rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Rock Slope Protection	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
Rock Slope Protection	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Rock Slope Protection	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Aggregate Base	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Aggregate Base	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Aggregate Base	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Clearing and Grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
Clearing and Grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
Clearing and Grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
Clearing and Grubbing	Other Construction Equipment	Diesel	Tier 4 Final	2.00	10.0	82.0	0.42
Clearing and Grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
Clearing and Grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
Site Restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
Site Restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
Site Restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
Site Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Levee Degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
Levee Degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
Levee Degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
Levee Degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
Levee Fill	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
Levee Fill	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
Levee Fill	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
Levee Fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
Levee Fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Pipe Rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
Pipe Rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40

Pipe Rehabilitation	Tractors/Loaders/Back	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Rock Slope Protection	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
Rock Slope Protection	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
Rock Slope Protection	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Aggregate Base	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Aggregate Base	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Aggregate Base	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Clearing and Grubbing	—	—	—	—
Clearing and Grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
Clearing and Grubbing	Vendor	—	9.10	HHDT,MHDT
Clearing and Grubbing	Hauling	0.00	20.0	HHDT
Clearing and Grubbing	Onsite truck	—	—	HHDT
Levee Degrade	—	—	—	—
Levee Degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
Levee Degrade	Vendor	—	9.10	HHDT,MHDT
Levee Degrade	Hauling	0.00	20.0	HHDT
Levee Degrade	Onsite truck	—	—	HHDT
SB Slurry Wall	—	—	—	—
SB Slurry Wall	Worker	20.0	11.9	LDA,LDT1,LDT2
SB Slurry Wall	Vendor	0.00	9.10	HHDT,MHDT
SB Slurry Wall	Hauling	0.00	20.0	HHDT
SB Slurry Wall	Onsite truck	—	—	HHDT

Levee Fill	—	—	—	—
Levee Fill	Worker	22.0	11.9	LDA,LDT1,LDT2
Levee Fill	Vendor	0.00	9.10	HHDT,MHDT
Levee Fill	Hauling	0.00	20.0	HHDT
Levee Fill	Onsite truck	—	—	HHDT
Pipe Rehabilitation	—	—	—	—
Pipe Rehabilitation	Worker	12.0	11.9	LDA,LDT1,LDT2
Pipe Rehabilitation	Vendor	0.00	9.10	HHDT,MHDT
Pipe Rehabilitation	Hauling	0.00	20.0	HHDT
Pipe Rehabilitation	Onsite truck	—	—	HHDT
Rock Slope Protection	—	—	—	—
Rock Slope Protection	Worker	12.0	11.9	LDA,LDT1,LDT2
Rock Slope Protection	Vendor	0.00	9.10	HHDT,MHDT
Rock Slope Protection	Hauling	0.00	20.0	HHDT
Rock Slope Protection	Onsite truck	—	—	HHDT
Site Restoration	—	—	—	—
Site Restoration	Worker	10.0	11.9	LDA,LDT1,LDT2
Site Restoration	Vendor	—	9.10	HHDT,MHDT
Site Restoration	Hauling	0.00	20.0	HHDT
Site Restoration	Onsite truck	—	—	HHDT
Aggregate Base	—	—	—	—
Aggregate Base	Worker	14.0	11.9	LDA,LDT1,LDT2
Aggregate Base	Vendor	—	9.10	HHDT,MHDT
Aggregate Base	Hauling	0.00	20.0	HHDT
Aggregate Base	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Clearing and Grubbing	—	—	—	—
Clearing and Grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
Clearing and Grubbing	Vendor	—	9.10	HHDT,MHDT
Clearing and Grubbing	Hauling	0.00	20.0	HHDT
Clearing and Grubbing	Onsite truck	—	—	HHDT
Levee Degrade	—	—	—	—
Levee Degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
Levee Degrade	Vendor	—	9.10	HHDT,MHDT
Levee Degrade	Hauling	0.00	20.0	HHDT
Levee Degrade	Onsite truck	—	—	HHDT
SB Slurry Wall	—	—	—	—
SB Slurry Wall	Worker	20.0	11.9	LDA,LDT1,LDT2
SB Slurry Wall	Vendor	0.00	9.10	HHDT,MHDT
SB Slurry Wall	Hauling	0.00	20.0	HHDT
SB Slurry Wall	Onsite truck	—	—	HHDT
Levee Fill	—	—	—	—
Levee Fill	Worker	22.0	11.9	LDA,LDT1,LDT2
Levee Fill	Vendor	0.00	9.10	HHDT,MHDT
Levee Fill	Hauling	0.00	20.0	HHDT
Levee Fill	Onsite truck	—	—	HHDT
Pipe Rehabilitation	—	—	—	—
Pipe Rehabilitation	Worker	12.0	11.9	LDA,LDT1,LDT2
Pipe Rehabilitation	Vendor	0.00	9.10	HHDT,MHDT
Pipe Rehabilitation	Hauling	0.00	20.0	HHDT
Pipe Rehabilitation	Onsite truck	—	—	HHDT
Rock Slope Protection	—	—	—	—
Rock Slope Protection	Worker	12.0	11.9	LDA,LDT1,LDT2
Rock Slope Protection	Vendor	0.00	9.10	HHDT,MHDT

Rock Slope Protection	Hauling	0.00	20.0	HHDT
Rock Slope Protection	Onsite truck	—	—	HHDT
Site Restoration	—	—	—	—
Site Restoration	Worker	10.0	11.9	LDA,LDT1,LDT2
Site Restoration	Vendor	—	9.10	HHDT,MHDT
Site Restoration	Hauling	0.00	20.0	HHDT
Site Restoration	Onsite truck	—	—	HHDT
Aggregate Base	—	—	—	—
Aggregate Base	Worker	14.0	11.9	LDA,LDT1,LDT2
Aggregate Base	Vendor	—	9.10	HHDT,MHDT
Aggregate Base	Hauling	0.00	20.0	HHDT
Aggregate Base	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Rock Slope Protection	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Clearing and Grubbing	—	—	56.3	0.00	—
Site Restoration	—	—	5.00	0.00	—
Levee Degrade	—	—	75.0	0.00	—
Aggregate Base	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Keyway Excavation
Construction Start Date	11/14/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.78	3.18	29.0	29.7	0.05	1.20	7.75	8.95	1.10	3.96	5.06	—	5,511	5,511	0.22	0.05	0.11	5,530
Mit.	0.54	0.54	3.43	29.7	0.05	0.10	7.75	7.85	0.10	3.96	4.06	—	5,511	5,511	0.22	0.05	0.11	5,530
% Reduced	86%	83%	88%	< 0.5%	—	91%	—	12%	91%	—	20%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21	0.17	1.59	1.63	< 0.005	0.07	0.42	0.49	0.06	0.22	0.28	—	302	302	0.01	< 0.005	< 0.005	303
Mit.	0.03	0.03	0.19	1.63	< 0.005	0.01	0.42	0.43	0.01	0.22	0.22	—	302	302	0.01	< 0.005	< 0.005	303
% Reduced	86%	83%	88%	—	—	91%	—	12%	91%	—	20%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.29	0.30	< 0.005	0.01	0.08	0.09	0.01	0.04	0.05	—	50.0	50.0	< 0.005	< 0.005	< 0.005	50.1
Mit.	0.01	0.01	0.03	0.30	< 0.005	< 0.005	0.08	0.08	< 0.005	0.04	0.04	—	50.0	50.0	< 0.005	< 0.005	< 0.005	50.1
% Reduced	86%	83%	88%	< 0.5%	—	91%	—	12%	91%	—	20%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.78	3.18	29.0	29.7	0.05	1.20	7.75	8.95	1.10	3.96	5.06	—	5,511	5,511	0.22	0.05	0.11	5,530
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.21	0.17	1.59	1.63	< 0.005	0.07	0.42	0.49	0.06	0.22	0.28	—	302	302	0.01	< 0.005	< 0.005	303
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.04	0.03	0.29	0.30	< 0.005	0.01	0.08	0.09	0.01	0.04	0.05	—	50.0	50.0	< 0.005	< 0.005	< 0.005	50.1

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.54	0.54	3.43	29.7	0.05	0.10	7.75	7.85	0.10	3.96	4.06	—	5,511	5,511	0.22	0.05	0.11	5,530
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.03	0.03	0.19	1.63	< 0.005	0.01	0.42	0.43	0.01	0.22	0.22	—	302	302	0.01	< 0.005	< 0.005	303
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.01	0.01	0.03	0.30	< 0.005	< 0.005	0.08	0.08	< 0.005	0.04	0.04	—	50.0	50.0	< 0.005	< 0.005	< 0.005	50.1

3. Construction Emissions Details

3.1. ID 15- keyway excavation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.77	3.17	29.0	29.6	0.05	1.20	—	1.20	1.10	—	1.10	—	5,475	5,475	0.22	0.04	—	5,494
Dust From Material Movement	—	—	—	—	—	—	7.72	7.72	—	3.95	3.95	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.59	1.62	< 0.005	0.07	—	0.07	0.06	—	0.06	—	300	300	0.01	< 0.005	—	301
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—

Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49.7	49.7	< 0.005	< 0.005	—	49.8
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	0.11	36.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 15- keyway excavation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.53	3.42	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,475	5,475	0.22	0.04	—	5,494
Dust From Material Movement	—	—	—	—	—	—	7.72	7.72	—	3.95	3.95	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.19	1.62	< 0.005	0.01	—	0.01	0.01	—	0.01	—	300	300	0.01	< 0.005	—	301
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—

Demoliti	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	49.7	49.7	< 0.005	< 0.005	—	49.8
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	0.11	36.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 15- keyway excavation	Site Preparation	7/31/2027	8/29/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 15- keyway excavation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38

ID 15- keyway excavation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
ID 15- keyway excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 15- keyway excavation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 15- keyway excavation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
ID 15- keyway excavation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 15- keyway excavation	—	—	—	—
ID 15- keyway excavation	Worker	4.00	11.9	LDA,LDT1,LDT2
ID 15- keyway excavation	Vendor	—	9.10	HHDT,MHDT
ID 15- keyway excavation	Hauling	0.00	20.0	HHDT
ID 15- keyway excavation	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 15- keyway excavation	—	—	—	—
ID 15- keyway excavation	Worker	4.00	11.9	LDA,LDT1,LDT2
ID 15- keyway excavation	Vendor	—	9.10	HHDT,MHDT

ID 15- keyway excavation	Hauling	0.00	20.0	HHDT
ID 15- keyway excavation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 15- keyway excavation	—	32,600	30.0	—	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Levee Degrade
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.77	4.01	35.6	38.1	0.08	1.45	4.68	6.13	1.33	1.82	3.16	—	8,827	8,827	0.35	0.08	0.50	8,859
Mit.	0.91	0.90	5.79	48.0	0.08	0.16	4.68	4.85	0.16	1.82	1.99	—	8,827	8,827	0.35	0.08	0.50	8,859
% Reduced	81%	78%	84%	-26%	—	89%	—	21%	88%	—	37%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Mit.	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.59	0.49	4.39	4.67	0.01	0.18	0.58	0.76	0.16	0.22	0.39	—	1,087	1,087	0.04	0.01	0.03	1,091
Mit.	0.11	0.11	0.71	5.90	0.01	0.02	0.58	0.60	0.02	0.22	0.24	—	1,087	1,087	0.04	0.01	0.03	1,091
% Reduced	81%	78%	84%	-26%	—	89%	—	21%	88%	—	37%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.80	0.85	< 0.005	0.03	0.11	0.14	0.03	0.04	0.07	—	180	180	0.01	< 0.005	< 0.005	181
Mit.	0.02	0.02	0.13	1.08	< 0.005	< 0.005	0.11	0.11	< 0.005	0.04	0.04	—	180	180	0.01	< 0.005	< 0.005	181
% Reduced	81%	78%	84%	-26%	—	89%	—	21%	88%	—	37%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.77	4.01	35.6	38.1	0.08	1.45	4.68	6.13	1.33	1.82	3.16	—	8,827	8,827	0.35	0.08	0.50	8,859
2027	4.62	3.89	33.5	37.7	0.08	1.35	4.67	6.02	1.24	1.82	3.06	—	8,824	8,824	0.35	0.08	0.45	8,856
2028	4.51	3.80	31.9	37.5	0.08	1.27	4.67	5.95	1.17	1.82	2.99	—	8,821	8,821	0.35	0.08	0.40	8,853
2029	4.38	3.69	29.9	37.1	0.08	1.19	4.68	5.86	1.09	1.82	2.91	—	8,816	8,816	0.35	0.07	0.36	8,846
2030	4.26	3.59	28.5	37.0	0.08	1.14	4.67	5.81	1.05	1.82	2.87	—	8,814	8,814	0.35	0.07	0.32	8,844
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2027	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.59	0.49	4.39	4.67	0.01	0.18	0.58	0.76	0.16	0.22	0.39	—	1,087	1,087	0.04	0.01	0.03	1,091
2027	0.11	0.10	0.83	0.93	< 0.005	0.03	0.12	0.15	0.03	0.04	0.08	—	217	217	0.01	< 0.005	< 0.005	218
2028	0.26	0.22	1.84	2.15	< 0.005	0.07	0.27	0.34	0.07	0.10	0.17	—	507	507	0.02	< 0.005	0.01	509

2029	0.20	0.17	1.39	1.72	< 0.005	0.06	0.22	0.27	0.05	0.08	0.14	—	410	410	0.02	< 0.005	0.01	412
2030	0.12	0.10	0.78	1.01	< 0.005	0.03	0.13	0.16	0.03	0.05	0.08	—	241	241	0.01	< 0.005	< 0.005	242
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.80	0.85	< 0.005	0.03	0.11	0.14	0.03	0.04	0.07	—	180	180	0.01	< 0.005	< 0.005	181
2027	0.02	0.02	0.15	0.17	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	36.0	36.0	< 0.005	< 0.005	< 0.005	36.1
2028	0.05	0.04	0.34	0.39	< 0.005	0.01	0.05	0.06	0.01	0.02	0.03	—	83.9	83.9	< 0.005	< 0.005	< 0.005	84.2
2029	0.04	0.03	0.25	0.31	< 0.005	0.01	0.04	0.05	0.01	0.02	0.02	—	67.9	67.9	< 0.005	< 0.005	< 0.005	68.1
2030	0.02	0.02	0.14	0.18	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	< 0.005	40.1

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.91	0.90	5.79	48.0	0.08	0.16	4.68	4.85	0.16	1.82	1.99	—	8,827	8,827	0.35	0.08	0.50	8,859
2027	0.90	0.90	5.78	47.9	0.08	0.16	4.67	4.83	0.16	1.82	1.98	—	8,824	8,824	0.35	0.08	0.45	8,856
2028	0.90	0.90	5.78	47.9	0.08	0.16	4.67	4.84	0.16	1.82	1.98	—	8,821	8,821	0.35	0.08	0.40	8,853
2029	0.89	0.89	5.78	47.8	0.08	0.16	4.68	4.84	0.16	1.82	1.98	—	8,816	8,816	0.35	0.07	0.36	8,846
2030	0.89	0.89	5.77	47.8	0.08	0.16	4.67	4.84	0.16	1.82	1.98	—	8,814	8,814	0.35	0.07	0.32	8,844
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2027	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.11	0.11	0.71	5.90	0.01	0.02	0.58	0.60	0.02	0.22	0.24	—	1,087	1,087	0.04	0.01	0.03	1,091
2027	0.02	0.02	0.14	1.18	< 0.005	< 0.005	0.12	0.12	< 0.005	0.04	0.05	—	217	217	0.01	< 0.005	< 0.005	218
2028	0.05	0.05	0.33	2.75	< 0.005	0.01	0.27	0.28	0.01	0.10	0.11	—	507	507	0.02	< 0.005	0.01	509
2029	0.04	0.04	0.27	2.22	< 0.005	0.01	0.22	0.23	0.01	0.08	0.09	—	410	410	0.02	< 0.005	0.01	412
2030	0.02	0.02	0.16	1.31	< 0.005	< 0.005	0.13	0.13	< 0.005	0.05	0.05	—	241	241	0.01	< 0.005	< 0.005	242
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.02	0.13	1.08	< 0.005	< 0.005	0.11	0.11	< 0.005	0.04	0.04	—	180	180	0.01	< 0.005	< 0.005	181
2027	< 0.005	< 0.005	0.03	0.22	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	36.0	36.0	< 0.005	< 0.005	< 0.005	36.1
2028	0.01	0.01	0.06	0.50	< 0.005	< 0.005	0.05	0.05	< 0.005	0.02	0.02	—	83.9	83.9	< 0.005	< 0.005	< 0.005	84.2
2029	0.01	0.01	0.05	0.41	< 0.005	< 0.005	0.04	0.04	< 0.005	0.02	0.02	—	67.9	67.9	< 0.005	< 0.005	< 0.005	68.1
2030	< 0.005	< 0.005	0.03	0.24	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	< 0.005	40.1

3. Construction Emissions Details

3.1. ID 1-Levee degrade (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	35.6	37.3	0.08	1.45	—	1.45	1.33	—	1.33	—	8,682	8,682	0.35	0.07	—	8,712
Dust From Material Movement	—	—	—	—	—	—	4.55	4.55	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.59	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	143	143	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.6	23.6	< 0.005	< 0.005	—	23.7
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.77	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	145	145	< 0.005	0.01	0.50	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 1-Levee degrade (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.84	5.75	47.2	0.08	0.16	—	0.16	0.16	—	0.16	—	8,682	8,682	0.35	0.07	—	8,712
Dust From Material Movement	—	—	—	—	—	—	4.55	4.55	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.01	0.01	0.09	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	143	143	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.6	23.6	< 0.005	< 0.005	—	23.7
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.77	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	145	145	< 0.005	0.01	0.50	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 7- levee degrade (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	35.6	37.3	0.08	1.45	—	1.45	1.33	—	1.33	—	8,682	8,682	0.35	0.07	—	8,712
Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.80	3.98	0.01	0.16	—	0.16	0.14	—	0.14	—	928	928	0.04	0.01	—	931
Dust From Material Movement	—	—	—	—	—	—	0.48	0.48	—	0.19	0.19	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.69	0.73	< 0.005	0.03	—	0.03	0.03	—	0.03	—	154	154	0.01	< 0.005	—	154
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.77	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	145	145	< 0.005	0.01	0.50	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.02	14.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.37	2.37	< 0.005	< 0.005	< 0.005	2.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 7- levee degrade (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.84	5.75	47.2	0.08	0.16	—	0.16	0.16	—	0.16	—	8,682	8,682	0.35	0.07	—	8,712
Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.61	5.05	0.01	0.02	—	0.02	0.02	—	0.02	—	928	928	0.04	0.01	—	931
Dust From Material Movement	—	—	—	—	—	—	0.48	0.48	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.11	0.92	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	154	154	0.01	< 0.005	—	154
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.77	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	145	145	< 0.005	0.01	0.50	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.02	14.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.37	2.37	< 0.005	< 0.005	< 0.005	2.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 2-levee degrade (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.55	3.83	33.5	36.9	0.08	1.35	—	1.35	1.24	—	1.24	—	8,681	8,681	0.35	0.07	—	8,711
Dust From Material Movement	—	—	—	—	—	—	4.53	4.53	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.83	0.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	214	214	0.01	< 0.005	—	215
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.4	35.4	< 0.005	< 0.005	—	35.6

Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.72	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.45	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.26	3.26	< 0.005	< 0.005	< 0.005	3.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 2-levee degrade (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.84	5.75	47.2	0.08	0.16	—	0.16	0.16	—	0.16	—	8,681	8,681	0.35	0.07	—	8,711
Dust From Material Movement	—	—	—	—	—	—	4.53	4.53	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	214	214	0.01	< 0.005	—	215
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	35.4	35.4	< 0.005	< 0.005	—	35.6
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.72	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.45	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.26	3.26	< 0.005	< 0.005	< 0.005	3.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 8.a - levee degrade (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.45	3.74	31.9	36.8	0.08	1.27	—	1.27	1.17	—	1.17	—	8,681	8,681	0.35	0.07	—	8,711
Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.83	2.12	< 0.005	0.07	—	0.07	0.07	—	0.07	—	499	499	0.02	< 0.005	—	501
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.33	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.7	82.7	< 0.005	< 0.005	—	83.0
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.40	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.46	7.46	< 0.005	< 0.005	0.01	7.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.23	1.23	< 0.005	< 0.005	< 0.005	1.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 8.a - levee degrade (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.84	5.75	47.2	0.08	0.16	—	0.16	0.16	—	0.16	—	8,681	8,681	0.35	0.07	—	8,711

Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.33	2.72	< 0.005	0.01	—	0.01	0.01	—	0.01	—	499	499	0.02	< 0.005	—	501
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	82.7	82.7	< 0.005	< 0.005	—	83.0
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.40	142

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.46	7.46	< 0.005	< 0.005	0.01	7.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.23	1.23	< 0.005	< 0.005	< 0.005	1.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 6- levee degrade (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.33	3.64	29.9	36.5	0.08	1.19	—	1.19	1.09	—	1.09	—	8,679	8,679	0.35	0.07	—	8,708
Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.39	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	404	404	0.02	< 0.005	—	406
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.25	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	66.9	66.9	< 0.005	< 0.005	—	67.2
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	< 0.005	< 0.005	0.36	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.93	5.93	< 0.005	< 0.005	0.01	6.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.98	0.98	< 0.005	< 0.005	< 0.005	0.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 6- levee degrade (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.84	5.75	47.2	0.08	0.16	—	0.16	0.16	—	0.16	—	8,679	8,679	0.35	0.07	—	8,708
Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.04	0.04	0.27	2.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	404	404	0.02	< 0.005	—	406
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.9	66.9	< 0.005	< 0.005	—	67.2
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	< 0.005	< 0.005	0.36	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.93	5.93	< 0.005	< 0.005	0.01	6.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.98	0.98	< 0.005	< 0.005	< 0.005	0.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 8.d- levee degrade (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.21	3.54	28.5	36.4	0.08	1.14	—	1.14	1.05	—	1.05	—	8,679	8,679	0.35	0.07	—	8,708
Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	238	238	0.01	< 0.005	—	239

Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.4	39.4	< 0.005	< 0.005	—	39.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.32	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.43	3.43	< 0.005	< 0.005	< 0.005	3.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 8.d- levee degrade (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.84	5.75	47.2	0.08	0.16	—	0.16	0.16	—	0.16	—	8,679	8,679	0.35	0.07	—	8,708
Dust From Material Movement	—	—	—	—	—	—	4.54	4.54	—	1.79	1.79	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.02	0.02	0.16	1.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	238	238	0.01	< 0.005	—	239
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.4	39.4	< 0.005	< 0.005	—	39.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.32	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.43	3.43	< 0.005	< 0.005	< 0.005	3.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 1-Levee degrade	Grading	7/10/2026	7/18/2026	5.00	6.00	—
ID 7- levee degrade	Grading	8/4/2026	9/26/2026	5.00	39.0	—
ID 2-levee degrade	Grading	8/8/2027	8/19/2027	5.00	9.00	—
ID 8.a - levee degrade	Grading	7/31/2028	8/28/2028	5.00	21.0	—
ID 6- levee degrade	Grading	8/17/2029	9/10/2029	5.00	17.0	—
ID 8.d- levee degrade	Grading	7/8/2030	7/21/2030	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 1-Levee degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 1-Levee degrade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 1-Levee degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 1-Levee degrade	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 1-Levee degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 1-Levee degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 7- levee degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 7- levee degrade	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 7- levee degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 7- levee degrade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 7- levee degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 7- levee degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 2-levee degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 2-levee degrade	Excavators	Diesel	Average	2.00	10.0	36.0	0.38

ID 2-levee degrade	Tractors/Loaders/Back	Diesel	Average	2.00	10.0	84.0	0.37
ID 2-levee degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 2-levee degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 2-levee degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.a - levee degrade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 8.a - levee degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.a - levee degrade	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 8.a - levee degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 8.a - levee degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 8.a - levee degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 6- levee degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 6- levee degrade	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 6- levee degrade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 6- levee degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 6- levee degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 6- levee degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.d- levee degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.d- levee degrade	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
ID 8.d- levee degrade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 8.d- levee degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 8.d- levee degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 8.d- levee degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 1-Levee degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 1-Levee degrade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 1-Levee degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 1-Levee degrade	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 1-Levee degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 1-Levee degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 7- levee degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 7- levee degrade	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 7- levee degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 7- levee degrade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 7- levee degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 7- levee degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 2-levee degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 2-levee degrade	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 2-levee degrade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 2-levee degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 2-levee degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 2-levee degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.a - levee degrade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 8.a - levee degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.a - levee degrade	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 8.a - levee degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 8.a - levee degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40

ID 8.a - levee degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 6- levee degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 6- levee degrade	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 6- levee degrade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 6- levee degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 6- levee degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 6- levee degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.d- levee degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.d- levee degrade	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 8.d- levee degrade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 8.d- levee degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 8.d- levee degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 8.d- levee degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 7- levee degrade	—	—	—	—
ID 7- levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 7- levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 7- levee degrade	Hauling	0.00	20.0	HHDT
ID 7- levee degrade	Onsite truck	—	—	HHDT
ID 1-Levee degrade	—	—	—	—
ID 1-Levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2

ID 1-Levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 1-Levee degrade	Hauling	0.00	20.0	HHDT
ID 1-Levee degrade	Onsite truck	—	—	HHDT
ID 2-levee degrade	—	—	—	—
ID 2-levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 2-levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 2-levee degrade	Hauling	0.00	20.0	HHDT
ID 2-levee degrade	Onsite truck	—	—	HHDT
ID 8.a - levee degrade	—	—	—	—
ID 8.a - levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 8.a - levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 8.a - levee degrade	Hauling	0.00	20.0	HHDT
ID 8.a - levee degrade	Onsite truck	—	—	HHDT
ID 6- levee degrade	—	—	—	—
ID 6- levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 6- levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 6- levee degrade	Hauling	0.00	20.0	HHDT
ID 6- levee degrade	Onsite truck	—	—	HHDT
ID 8.d- levee degrade	—	—	—	—
ID 8.d- levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 8.d- levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 8.d- levee degrade	Hauling	0.00	20.0	HHDT
ID 8.d- levee degrade	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 7- levee degrade	—	—	—	—
ID 7- levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2

ID 7- levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 7- levee degrade	Hauling	0.00	20.0	HHDT
ID 7- levee degrade	Onsite truck	—	—	HHDT
ID 1-Levee degrade	—	—	—	—
ID 1-Levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 1-Levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 1-Levee degrade	Hauling	0.00	20.0	HHDT
ID 1-Levee degrade	Onsite truck	—	—	HHDT
ID 2-levee degrade	—	—	—	—
ID 2-levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 2-levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 2-levee degrade	Hauling	0.00	20.0	HHDT
ID 2-levee degrade	Onsite truck	—	—	HHDT
ID 8.a - levee degrade	—	—	—	—
ID 8.a - levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 8.a - levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 8.a - levee degrade	Hauling	0.00	20.0	HHDT
ID 8.a - levee degrade	Onsite truck	—	—	HHDT
ID 6- levee degrade	—	—	—	—
ID 6- levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 6- levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 6- levee degrade	Hauling	0.00	20.0	HHDT
ID 6- levee degrade	Onsite truck	—	—	HHDT
ID 8.d- levee degrade	—	—	—	—
ID 8.d- levee degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
ID 8.d- levee degrade	Vendor	—	9.10	HHDT,MHDT
ID 8.d- levee degrade	Hauling	0.00	20.0	HHDT
ID 8.d- levee degrade	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
ID 8.d- levee degrade	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 1-Levee degrade	—	12,100	22.5	0.00	—
ID 7- levee degrade	—	66,100	146	0.00	—
ID 2-levee degrade	—	13,400	33.8	0.00	—
ID 8.a - levee degrade	—	35,500	78.8	0.00	—
ID 6- levee degrade	—	31,600	63.8	0.00	—
ID 8.d- levee degrade	—	17,300	37.5	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Levee Fill
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.3	8.66	73.5	85.8	0.16	3.04	11.9	14.9	2.80	4.99	7.79	—	18,186	18,186	0.72	0.16	1.85	18,254
Mit.	2.19	2.13	12.4	101	0.16	0.39	11.9	12.3	0.38	4.99	5.38	—	18,186	18,186	0.72	0.16	1.85	18,254
% Reduced	79%	75%	83%	-18%	—	87%	—	18%	86%	—	31%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.59	5.56	47.3	54.8	0.10	1.96	7.67	9.62	1.80	3.22	5.01	—	11,667	11,667	0.47	0.11	0.03	11,711
Mit.	1.39	1.36	8.00	64.8	0.10	0.25	7.67	7.92	0.25	3.22	3.46	—	11,667	11,667	0.47	0.11	0.03	11,711
% Reduced	79%	76%	83%	-18%	—	87%	—	18%	86%	—	31%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.62	1.36	11.6	13.4	0.03	0.48	1.88	2.36	0.44	0.79	1.23	—	2,863	2,863	0.11	0.03	0.13	2,873
Mit.	0.34	0.33	1.96	15.9	0.03	0.06	1.88	1.95	0.06	0.79	0.85	—	2,863	2,863	0.11	0.03	0.13	2,873
% Reduced	79%	75%	83%	-18%	—	87%	—	18%	86%	—	31%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.25	2.11	2.45	< 0.005	0.09	0.34	0.43	0.08	0.14	0.22	—	474	474	0.02	< 0.005	0.02	476
Mit.	0.06	0.06	0.36	2.90	< 0.005	0.01	0.34	0.36	0.01	0.14	0.15	—	474	474	0.02	< 0.005	0.02	476
% Reduced	79%	75%	83%	-18%	—	87%	—	18%	86%	—	31%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.78	3.18	27.7	30.9	0.06	1.16	4.24	5.40	1.07	1.78	2.85	—	6,484	6,484	0.26	0.06	0.68	6,509
2027	10.3	8.66	73.5	85.8	0.16	3.04	11.9	14.9	2.80	4.99	7.79	—	18,186	18,186	0.72	0.16	1.85	18,254
2028	2.88	2.43	20.1	24.6	0.05	0.82	3.44	4.26	0.76	1.44	2.19	—	5,220	5,220	0.21	0.05	0.55	5,240
2029	3.50	2.94	23.7	30.2	0.06	0.97	4.21	5.18	0.89	1.78	2.67	—	6,471	6,471	0.26	0.05	0.49	6,494
2030	6.81	5.73	45.4	60.4	0.12	1.86	8.52	10.4	1.71	3.57	5.28	—	12,937	12,937	0.52	0.10	0.87	12,982
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2027	6.59	5.56	47.3	54.8	0.10	1.96	7.67	9.62	1.80	3.22	5.01	—	11,667	11,667	0.47	0.11	0.03	11,711
2028	3.58	3.01	25.1	30.3	0.06	1.03	4.22	5.25	0.95	1.78	2.73	—	6,459	6,459	0.26	0.06	0.01	6,483
2029	3.49	2.94	23.7	30.0	0.06	0.97	4.22	5.19	0.89	1.78	2.67	—	6,453	6,453	0.26	0.06	0.01	6,477
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.10	0.84	0.93	< 0.005	0.03	0.13	0.16	0.03	0.05	0.09	—	195	195	0.01	< 0.005	0.01	196
2027	1.62	1.36	11.6	13.4	0.03	0.48	1.88	2.36	0.44	0.79	1.23	—	2,863	2,863	0.11	0.03	0.13	2,873
2028	0.97	0.82	6.79	8.21	0.02	0.28	1.15	1.43	0.26	0.48	0.74	—	1,752	1,752	0.07	0.02	0.07	1,759

2029	0.28	0.24	1.92	2.44	< 0.005	0.08	0.34	0.42	0.07	0.14	0.22	—	523	523	0.02	< 0.005	0.02	525
2030	0.44	0.37	2.94	3.89	0.01	0.12	0.55	0.67	0.11	0.23	0.34	—	836	836	0.03	0.01	0.03	839
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.02	0.15	0.17	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	—	32.3	32.3	< 0.005	< 0.005	< 0.005	32.4
2027	0.29	0.25	2.11	2.45	< 0.005	0.09	0.34	0.43	0.08	0.14	0.22	—	474	474	0.02	< 0.005	0.02	476
2028	0.18	0.15	1.24	1.50	< 0.005	0.05	0.21	0.26	0.05	0.09	0.13	—	290	290	0.01	< 0.005	0.01	291
2029	0.05	0.04	0.35	0.44	< 0.005	0.01	0.06	0.08	0.01	0.03	0.04	—	86.6	86.6	< 0.005	< 0.005	< 0.005	86.9
2030	0.08	0.07	0.54	0.71	< 0.005	0.02	0.10	0.12	0.02	0.04	0.06	—	138	138	0.01	< 0.005	< 0.005	139

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.78	0.76	4.43	36.2	0.06	0.14	4.24	4.37	0.14	1.78	1.92	—	6,484	6,484	0.26	0.06	0.68	6,509
2027	2.19	2.13	12.4	101	0.16	0.39	11.9	12.3	0.38	4.99	5.38	—	18,186	18,186	0.72	0.16	1.85	18,254
2028	0.63	0.62	3.55	29.0	0.05	0.11	3.44	3.55	0.11	1.44	1.55	—	5,220	5,220	0.21	0.05	0.55	5,240
2029	0.76	0.74	4.41	36.0	0.06	0.14	4.21	4.35	0.14	1.78	1.91	—	6,471	6,471	0.26	0.05	0.49	6,494
2030	1.52	1.47	8.81	71.9	0.12	0.28	8.52	8.80	0.27	3.57	3.84	—	12,937	12,937	0.52	0.10	0.87	12,982
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2027	1.39	1.36	8.00	64.8	0.10	0.25	7.67	7.92	0.25	3.22	3.46	—	11,667	11,667	0.47	0.11	0.03	11,711
2028	0.76	0.74	4.43	35.9	0.06	0.14	4.22	4.36	0.14	1.78	1.92	—	6,459	6,459	0.26	0.06	0.01	6,483
2029	0.76	0.74	4.43	35.8	0.06	0.14	4.22	4.36	0.14	1.78	1.92	—	6,453	6,453	0.26	0.06	0.01	6,477
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.02	0.02	0.13	1.09	< 0.005	< 0.005	0.13	0.13	< 0.005	0.05	0.06	—	195	195	0.01	< 0.005	0.01	196
2027	0.34	0.33	1.96	15.9	0.03	0.06	1.88	1.95	0.06	0.79	0.85	—	2,863	2,863	0.11	0.03	0.13	2,873
2028	0.21	0.20	1.20	9.72	0.02	0.04	1.15	1.19	0.04	0.48	0.52	—	1,752	1,752	0.07	0.02	0.07	1,759
2029	0.06	0.06	0.36	2.90	< 0.005	0.01	0.34	0.35	0.01	0.14	0.16	—	523	523	0.02	< 0.005	0.02	525
2030	0.10	0.09	0.57	4.63	0.01	0.02	0.55	0.57	0.02	0.23	0.25	—	836	836	0.03	0.01	0.03	839
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.02	0.20	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	32.3	32.3	< 0.005	< 0.005	< 0.005	32.4
2027	0.06	0.06	0.36	2.90	< 0.005	0.01	0.34	0.36	0.01	0.14	0.15	—	474	474	0.02	< 0.005	0.02	476
2028	0.04	0.04	0.22	1.77	< 0.005	0.01	0.21	0.22	0.01	0.09	0.09	—	290	290	0.01	< 0.005	0.01	291
2029	0.01	0.01	0.07	0.53	< 0.005	< 0.005	0.06	0.06	< 0.005	0.03	0.03	—	86.6	86.6	< 0.005	< 0.005	< 0.005	86.9
2030	0.02	0.02	0.10	0.85	< 0.005	< 0.005	0.10	0.10	< 0.005	0.04	0.05	—	138	138	0.01	< 0.005	< 0.005	139

3. Construction Emissions Details

3.1. ID 1-levee fill (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.68	3.09	27.7	29.9	0.06	1.16	—	1.16	1.07	—	1.07	—	6,285	6,285	0.25	0.05	—	6,306
Dust From Material Movement	—	—	—	—	—	—	4.05	4.05	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.83	0.90	< 0.005	0.03	—	0.03	0.03	—	0.03	—	189	189	0.01	< 0.005	—	190
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.4	31.4	< 0.005	< 0.005	—	31.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	1.06	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	199	199	< 0.005	0.01	0.68	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.56	5.56	< 0.005	< 0.005	0.01	5.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.92	0.92	< 0.005	< 0.005	< 0.005	0.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 1-levee fill (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,285	6,285	0.25	0.05	—	6,306
Dust From Material Movement	—	—	—	—	—	—	4.05	4.05	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.02	0.02	0.13	1.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	189	189	0.01	< 0.005	—	190
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.4	31.4	< 0.005	< 0.005	—	31.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	1.06	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	199	199	< 0.005	0.01	0.68	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.56	5.56	< 0.005	< 0.005	0.01	5.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.92	0.92	< 0.005	< 0.005	< 0.005	0.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 12- levee fill (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	21.0	23.7	0.05	0.87	—	0.87	0.80	—	0.80	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.35	3.35	—	1.41	1.41	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.75	0.84	< 0.005	0.03	—	0.03	0.03	—	0.03	—	179	179	0.01	< 0.005	—	180
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.6	29.6	< 0.005	< 0.005	—	29.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.02	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 12- levee fill (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.54	3.50	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.35	3.35	—	1.41	1.41	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.00	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	179	179	0.01	< 0.005	—	180
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.6	29.6	< 0.005	< 0.005	—	29.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.02	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 15- levee fill (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	21.0	23.7	0.05	0.87	—	0.87	0.80	—	0.80	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	21.0	23.7	0.05	0.87	—	0.87	0.80	—	0.80	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.50	6.21	0.01	0.23	—	0.23	0.21	—	0.21	—	1,318	1,318	0.05	0.01	—	1,323
Dust From Material Movement	—	—	—	—	—	—	0.85	0.85	—	0.37	0.37	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.00	1.13	< 0.005	0.04	—	0.04	0.04	—	0.04	—	218	218	0.01	< 0.005	—	219
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.98	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.62	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.02	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.7	47.7	< 0.005	< 0.005	0.07	48.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.89	7.89	< 0.005	< 0.005	0.01	8.01

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 15- levee fill (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.54	3.50	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.54	3.50	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.14	0.14	0.92	7.38	0.01	0.03	—	0.03	0.03	—	0.03	—	1,318	1,318	0.05	0.01	—	1,323
Dust From Material Movement	—	—	—	—	—	—	0.85	0.85	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.03	0.03	0.17	1.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	218	218	0.01	< 0.005	—	219
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.98	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.62	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.02	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.7	47.7	< 0.005	< 0.005	0.07	48.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.89	7.89	< 0.005	< 0.005	0.01	8.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 15- levee fill (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.80	2.35	20.1	23.6	0.05	0.82	—	0.82	0.76	—	0.76	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.80	2.35	20.1	23.6	0.05	0.82	—	0.82	0.76	—	0.76	—	5,028	5,028	0.20	0.04	—	5,045

Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.73	4.40	0.01	0.15	—	0.15	0.14	—	0.14	—	935	935	0.04	0.01	—	938
Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.26	0.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.68	0.80	< 0.005	0.03	—	0.03	0.03	—	0.03	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.92	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	192	192	< 0.005	0.01	0.55	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.72	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	174	174	< 0.005	0.01	0.01	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.1	33.1	< 0.005	< 0.005	0.04	33.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 15- levee fill (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.54	3.50	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.54	3.50	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	3.26	3.26	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.65	5.23	0.01	0.02	—	0.02	0.02	—	0.02	—	935	935	0.04	0.01	—	938
Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.26	0.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.95	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.92	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	192	192	< 0.005	0.01	0.55	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.72	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	174	174	< 0.005	0.01	0.01	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.1	33.1	< 0.005	< 0.005	0.04	33.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 2-levee fill (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	3.58	3.00	26.2	29.6	0.06	1.09	—	1.09	1.00	—	1.00	—	6,285	6,285	0.25	0.05	—	6,306
Dust From Material Movement	—	—	—	—	—	—	4.03	4.03	—	1.73	1.73	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.65	0.73	< 0.005	0.03	—	0.03	0.02	—	0.02	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	—	25.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.98	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.62	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.48	4.48	< 0.005	< 0.005	0.01	4.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 2-levee fill (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,285	6,285	0.25	0.05	—	6,306

Dust From Material Movement	—	—	—	—	—	—	4.03	4.03	—	1.73	1.73	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.87	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	—	25.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.98	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.62	199

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.48	4.48	< 0.005	< 0.005	0.01	4.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 7- levee fill (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.58	3.00	26.2	29.6	0.06	1.09	—	1.09	1.00	—	1.00	—	6,285	6,285	0.25	0.05	—	6,306
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.58	3.00	26.2	29.6	0.06	1.09	—	1.09	1.00	—	1.00	—	6,285	6,285	0.25	0.05	—	6,306
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.53	4.67	5.27	0.01	0.19	—	0.19	0.18	—	0.18	—	1,119	1,119	0.05	0.01	—	1,123
Dust From Material Movement	—	—	—	—	—	—	0.72	0.72	—	0.31	0.31	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.85	0.96	< 0.005	0.04	—	0.04	0.03	—	0.03	—	185	185	0.01	< 0.005	—	186
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.98	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.62	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.02	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.4	32.4	< 0.005	< 0.005	0.05	32.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.36	5.36	< 0.005	< 0.005	0.01	5.44
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 7- levee fill (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,285	6,285	0.25	0.05	—	6,306
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,285	6,285	0.25	0.05	—	6,306
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	0.78	6.26	0.01	0.02	—	0.02	0.02	—	0.02	—	1,119	1,119	0.05	0.01	—	1,123
Dust From Material Movement	—	—	—	—	—	—	0.72	0.72	—	0.31	0.31	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.14	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	185	185	0.01	< 0.005	—	186
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.98	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.62	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.02	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.4	32.4	< 0.005	< 0.005	0.05	32.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.36	5.36	< 0.005	< 0.005	0.01	5.44
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. ID 8.a- levee fill (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.50	2.94	25.1	29.6	0.06	1.03	—	1.03	0.95	—	0.95	—	6,285	6,285	0.25	0.05	—	6,307
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.04	3.59	0.01	0.12	—	0.12	0.11	—	0.11	—	763	763	0.03	0.01	—	765
Dust From Material Movement	—	—	—	—	—	—	0.49	0.49	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.07	0.56	0.65	< 0.005	0.02	—	0.02	0.02	—	0.02	—	126	126	0.01	< 0.005	—	127
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.72	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	174	174	< 0.005	0.01	0.01	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.03	21.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.58	3.58	< 0.005	< 0.005	< 0.005	3.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. ID 8.a- levee fill (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,285	6,285	0.25	0.05	—	6,307
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.53	4.27	0.01	0.02	—	0.02	0.02	—	0.02	—	763	763	0.03	0.01	—	765
Dust From Material Movement	—	—	—	—	—	—	0.49	0.49	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	126	126	0.01	< 0.005	—	127

Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.72	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	174	174	< 0.005	0.01	0.01	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.03	21.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.58	3.58	< 0.005	< 0.005	< 0.005	3.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. ID 8.a- levee fill (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.42	2.87	23.7	29.4	0.06	0.97	—	0.97	0.89	—	0.89	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.53	1.90	< 0.005	0.06	—	0.06	0.06	—	0.06	—	406	406	0.02	< 0.005	—	407
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	67.2	67.2	< 0.005	< 0.005	—	67.4
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.68	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	171	171	< 0.005	0.01	0.01	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. ID 8.a- levee fill (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.28	2.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	406	406	0.02	< 0.005	—	407
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.2	67.2	< 0.005	< 0.005	—	67.4
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.68	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	171	171	< 0.005	0.01	0.01	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. ID 8.b -levee fill (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.42	2.87	23.7	29.4	0.06	0.97	—	0.97	0.89	—	0.89	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.01	4.01	—	1.73	1.73	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.1	86.1	< 0.005	< 0.005	—	86.4
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.2	14.2	< 0.005	< 0.005	—	14.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.86	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	189	189	< 0.005	< 0.005	0.49	190
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. ID 8.b -levee fill (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.01	4.01	—	1.73	1.73	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	86.1	86.1	< 0.005	< 0.005	—	86.4
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.2	14.2	< 0.005	< 0.005	—	14.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.86	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	189	189	< 0.005	< 0.005	0.49	190
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.43

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. ID 8.c- levee fill (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.42	2.87	23.7	29.4	0.06	0.97	—	0.97	0.89	—	0.89	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.03	4.03	—	1.73	1.73	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.2	17.2	< 0.005	< 0.005	—	17.3

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.85	2.85	< 0.005	< 0.005	—	2.86
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.86	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	189	189	< 0.005	< 0.005	0.49	190
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. ID 8.c- levee fill (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.03	4.03	—	1.73	1.73	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.2	17.2	< 0.005	< 0.005	—	17.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.85	2.85	< 0.005	< 0.005	—	2.86
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.86	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	189	189	< 0.005	< 0.005	0.49	190
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. ID 6- levee fill (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.34	2.80	22.7	29.4	0.06	0.93	—	0.93	0.85	—	0.85	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.05	4.05	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	1.86	2.42	< 0.005	0.08	—	0.08	0.07	—	0.07	—	516	516	0.02	< 0.005	—	518
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.34	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.5	85.5	< 0.005	< 0.005	—	85.8

Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.02	14.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.34	2.34	< 0.005	< 0.005	< 0.005	2.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. ID 6- levee fill (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.05	4.05	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.36	2.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	516	516	0.02	< 0.005	—	518
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	85.5	85.5	< 0.005	< 0.005	—	85.8
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.02	14.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.34	2.34	< 0.005	< 0.005	< 0.005	2.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. ID 8.e- levee fill (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.34	2.80	22.7	29.4	0.06	0.93	—	0.93	0.85	—	0.85	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.10	4.10	—	1.75	1.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.16	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	34.4	34.4	< 0.005	< 0.005	—	34.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.70	5.70	< 0.005	< 0.005	—	5.72
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. ID 8.e- levee fill (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304

Dust From Material Movement	—	—	—	—	—	—	4.10	4.10	—	1.75	1.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.4	34.4	< 0.005	< 0.005	—	34.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.70	5.70	< 0.005	< 0.005	—	5.72
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. ID 8.d- levee fill (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.34	2.80	22.7	29.4	0.06	0.93	—	0.93	0.85	—	0.85	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.05	4.05	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.50	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	138	138	0.01	< 0.005	—	138
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.8	22.8	< 0.005	< 0.005	—	22.9
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	< 0.005	3.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. ID 8.d- levee fill (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304
Dust From Material Movement	—	—	—	—	—	—	4.05	4.05	—	1.74	1.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.02	0.01	0.10	0.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	138	138	0.01	< 0.005	—	138
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.8	22.8	< 0.005	< 0.005	—	22.9
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	< 0.005	3.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. ID 11- levee fill (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.67	2.24	18.1	23.5	0.05	0.74	—	0.74	0.68	—	0.68	—	5,026	5,026	0.20	0.04	—	5,043
Dust From Material Movement	—	—	—	—	—	—	3.21	3.21	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.45	0.58	< 0.005	0.02	—	0.02	0.02	—	0.02	—	124	124	0.01	< 0.005	—	124
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.5	20.5	< 0.005	< 0.005	—	20.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.24	4.24	< 0.005	< 0.005	< 0.005	4.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. ID 11- levee fill (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.54	3.50	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,026	5,026	0.20	0.04	—	5,043
Dust From Material Movement	—	—	—	—	—	—	3.21	3.21	—	1.39	1.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.69	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	124	124	0.01	< 0.005	—	124
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.5	20.5	< 0.005	< 0.005	—	20.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.24	4.24	< 0.005	< 0.005	< 0.005	4.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 1-levee fill	Grading	8/15/2026	8/31/2026	5.00	11.0	—
ID 12- levee fill	Grading	2/5/2027	2/23/2027	5.00	13.0	—
ID 15- levee fill	Grading	8/20/2027	4/4/2028	5.00	163	—
ID 2-levee fill	Grading	9/19/2027	9/30/2027	5.00	9.00	—
ID 7- levee fill	Grading	9/26/2027	12/26/2027	5.00	65.0	—
ID 8.a- levee fill	Grading	10/31/2028	2/2/2029	5.00	69.0	—
ID 8.b -levee fill	Grading	7/8/2029	7/15/2029	5.00	5.00	—
ID 8.c- levee fill	Grading	9/9/2029	9/10/2029	5.00	1.00	—
ID 6- levee fill	Grading	7/20/2030	9/1/2030	5.00	30.0	—
ID 8.e- levee fill	Grading	8/10/2030	8/13/2030	5.00	2.00	—
ID 8.d- levee fill	Grading	9/6/2030	9/17/2030	5.00	8.00	—
ID 11- levee fill	Grading	9/10/2030	9/21/2030	5.00	9.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 1-levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 1-levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 1-levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 1-levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 1-levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 1-levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 1-levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 12- levee fill	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
ID 12- levee fill	Graders	Diesel	Average	1.00	8.00	148	0.41
ID 12- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	8.00	93.0	0.40
ID 12- levee fill	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
ID 12- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
ID 12- levee fill	Scrapers	Diesel	Average	1.00	8.00	423	0.48
ID 12- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
ID 15- levee fill	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
ID 15- levee fill	Graders	Diesel	Average	1.00	8.00	148	0.41
ID 15- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	8.00	93.0	0.40
ID 15- levee fill	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
ID 15- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
ID 15- levee fill	Scrapers	Diesel	Average	1.00	8.00	423	0.48

ID 15- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
ID 2-levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 2-levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 2-levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 2-levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 2-levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 2-levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 2-levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 7- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 7- levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 7- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 7- levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 7- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 7- levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 7- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.a- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.a- levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.a- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 8.a- levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.a- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 8.a- levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 8.a- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.b -levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.b -levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41

ID 8.b -levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 8.b -levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.b -levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 8.b -levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 8.b -levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.c- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.c- levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.c- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 8.c- levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.c- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 8.c- levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 8.c- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 6- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 6- levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 6- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 6- levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 6- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 6- levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 6- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.e- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.e- levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.e- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 8.e- levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.e- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40

ID 8.e- levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 8.e- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.d- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.d- levee fill	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.d- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 8.d- levee fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.d- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 8.d- levee fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
ID 8.d- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 11- levee fill	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
ID 11- levee fill	Graders	Diesel	Average	1.00	8.00	148	0.41
ID 11- levee fill	Other Material Handling Equipment	Diesel	Average	2.00	8.00	93.0	0.40
ID 11- levee fill	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
ID 11- levee fill	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
ID 11- levee fill	Scrapers	Diesel	Average	1.00	8.00	423	0.48
ID 11- levee fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 1-levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 1-levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 1-levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 1-levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 1-levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40

ID 1-levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 1-levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 12- levee fill	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
ID 12- levee fill	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
ID 12- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	8.00	93.0	0.40
ID 12- levee fill	Rollers	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
ID 12- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
ID 12- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	8.00	423	0.48
ID 12- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
ID 15- levee fill	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
ID 15- levee fill	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
ID 15- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	8.00	93.0	0.40
ID 15- levee fill	Rollers	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
ID 15- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
ID 15- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	8.00	423	0.48
ID 15- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
ID 2-levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 2-levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 2-levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 2-levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 2-levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 2-levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 2-levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 7- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38

ID 7- levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 7- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 7- levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 7- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 7- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 7- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.a- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.a- levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.a- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 8.a- levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.a- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 8.a- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 8.a- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.b -levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.b -levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.b -levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 8.b -levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.b -levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 8.b -levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 8.b -levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.c- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.c- levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.c- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 8.c- levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38

ID 8.c- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 8.c- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 8.c- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 6- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 6- levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 6- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 6- levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 6- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 6- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 6- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.e- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.e- levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.e- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 8.e- levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.e- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 8.e- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 8.e- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.d- levee fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
ID 8.d- levee fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.d- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 8.d- levee fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.d- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 8.d- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
ID 8.d- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

ID 11- levee fill	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
ID 11- levee fill	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
ID 11- levee fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	8.00	93.0	0.40
ID 11- levee fill	Rollers	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
ID 11- levee fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
ID 11- levee fill	Scrapers	Diesel	Tier 4 Final	1.00	8.00	423	0.48
ID 11- levee fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 1-levee fill	—	—	—	—
ID 1-levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 1-levee fill	Vendor	—	9.10	HHDT,MHDT
ID 1-levee fill	Hauling	0.00	20.0	HHDT
ID 1-levee fill	Onsite truck	—	—	HHDT
ID 12- levee fill	—	—	—	—
ID 12- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 12- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 12- levee fill	Hauling	0.00	20.0	HHDT
ID 12- levee fill	Onsite truck	—	—	HHDT
ID 15- levee fill	—	—	—	—
ID 15- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 15- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 15- levee fill	Hauling	0.00	20.0	HHDT
ID 15- levee fill	Onsite truck	—	—	HHDT

ID 2-levee fill	—	—	—	—
ID 2-levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 2-levee fill	Vendor	—	9.10	HHDT,MHDT
ID 2-levee fill	Hauling	0.00	20.0	HHDT
ID 2-levee fill	Onsite truck	—	—	HHDT
ID 7- levee fill	—	—	—	—
ID 7- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 7- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 7- levee fill	Hauling	0.00	20.0	HHDT
ID 7- levee fill	Onsite truck	—	—	HHDT
ID 8.a- levee fill	—	—	—	—
ID 8.a- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.a- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.a- levee fill	Hauling	0.00	20.0	HHDT
ID 8.a- levee fill	Onsite truck	—	—	HHDT
ID 8.b -levee fill	—	—	—	—
ID 8.b -levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.b -levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.b -levee fill	Hauling	0.00	20.0	HHDT
ID 8.b -levee fill	Onsite truck	—	—	HHDT
ID 8.c- levee fill	—	—	—	—
ID 8.c- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.c- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.c- levee fill	Hauling	0.00	20.0	HHDT
ID 8.c- levee fill	Onsite truck	—	—	HHDT
ID 6- levee fill	—	—	—	—
ID 6- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 6- levee fill	Vendor	—	9.10	HHDT,MHDT

ID 6- levee fill	Hauling	0.00	20.0	HHDT
ID 6- levee fill	Onsite truck	—	—	HHDT
ID 8.e- levee fill	—	—	—	—
ID 8.e- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.e- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.e- levee fill	Hauling	0.00	20.0	HHDT
ID 8.e- levee fill	Onsite truck	—	—	HHDT
ID 8.d- levee fill	—	—	—	—
ID 8.d- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.d- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.d- levee fill	Hauling	0.00	20.0	HHDT
ID 8.d- levee fill	Onsite truck	—	—	HHDT
ID 11- levee fill	—	—	—	—
ID 11- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 11- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 11- levee fill	Hauling	0.00	20.0	HHDT
ID 11- levee fill	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 1-levee fill	—	—	—	—
ID 1-levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 1-levee fill	Vendor	—	9.10	HHDT,MHDT
ID 1-levee fill	Hauling	0.00	20.0	HHDT
ID 1-levee fill	Onsite truck	—	—	HHDT
ID 12- levee fill	—	—	—	—
ID 12- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 12- levee fill	Vendor	—	9.10	HHDT,MHDT

ID 12- levee fill	Hauling	0.00	20.0	HHDT
ID 12- levee fill	Onsite truck	—	—	HHDT
ID 15- levee fill	—	—	—	—
ID 15- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 15- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 15- levee fill	Hauling	0.00	20.0	HHDT
ID 15- levee fill	Onsite truck	—	—	HHDT
ID 2-levee fill	—	—	—	—
ID 2-levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 2-levee fill	Vendor	—	9.10	HHDT,MHDT
ID 2-levee fill	Hauling	0.00	20.0	HHDT
ID 2-levee fill	Onsite truck	—	—	HHDT
ID 7- levee fill	—	—	—	—
ID 7- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 7- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 7- levee fill	Hauling	0.00	20.0	HHDT
ID 7- levee fill	Onsite truck	—	—	HHDT
ID 8.a- levee fill	—	—	—	—
ID 8.a- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.a- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.a- levee fill	Hauling	0.00	20.0	HHDT
ID 8.a- levee fill	Onsite truck	—	—	HHDT
ID 8.b -levee fill	—	—	—	—
ID 8.b -levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.b -levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.b -levee fill	Hauling	0.00	20.0	HHDT
ID 8.b -levee fill	Onsite truck	—	—	HHDT
ID 8.c- levee fill	—	—	—	—

ID 8.c- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.c- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.c- levee fill	Hauling	0.00	20.0	HHDT
ID 8.c- levee fill	Onsite truck	—	—	HHDT
ID 6- levee fill	—	—	—	—
ID 6- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 6- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 6- levee fill	Hauling	0.00	20.0	HHDT
ID 6- levee fill	Onsite truck	—	—	HHDT
ID 8.e- levee fill	—	—	—	—
ID 8.e- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.e- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.e- levee fill	Hauling	0.00	20.0	HHDT
ID 8.e- levee fill	Onsite truck	—	—	HHDT
ID 8.d- levee fill	—	—	—	—
ID 8.d- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 8.d- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 8.d- levee fill	Hauling	0.00	20.0	HHDT
ID 8.d- levee fill	Onsite truck	—	—	HHDT
ID 11- levee fill	—	—	—	—
ID 11- levee fill	Worker	22.0	11.9	LDA,LDT1,LDT2
ID 11- levee fill	Vendor	—	9.10	HHDT,MHDT
ID 11- levee fill	Hauling	0.00	20.0	HHDT
ID 11- levee fill	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 1-levee fill	28,900	—	27.5	0.00	—
ID 12- levee fill	75,600	—	26.0	0.00	—
ID 15- levee fill	431,000	—	326	0.00	—
ID 2-levee fill	17,000	—	22.5	0.00	—
ID 7- levee fill	153,900	—	163	0.00	—
ID 8.a- levee fill	156,100	—	173	0.00	—
ID 8.b -levee fill	6,400	—	12.5	0.00	—
ID 8.c- levee fill	1,900	—	2.50	0.00	—
ID 6- levee fill	75,400	—	75.0	0.00	—
ID 8.e- levee fill	8,800	—	5.00	0.00	—
ID 8.d- levee fill	21,800	—	20.0	0.00	—
ID 11- levee fill	9,300	—	18.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale- Restoration MBC
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	720	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.77	2.34	14.8	28.0	0.06	0.56	0.24	0.80	0.52	0.06	0.57	—	6,585	6,585	0.26	0.05	0.55	6,608
Mit.	0.69	0.68	3.16	38.4	0.06	0.12	0.24	0.36	0.12	0.06	0.17	—	6,585	6,585	0.26	0.05	0.55	6,608
% Reduced	75%	71%	79%	-37%	—	79%	—	56%	77%	—	69%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.54	1.29	9.47	14.0	0.03	0.39	0.12	0.51	0.36	0.03	0.39	—	3,288	3,288	0.13	0.03	0.01	3,301
Mit.	0.36	0.35	1.60	19.2	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,288	3,288	0.13	0.03	0.01	3,301
% Reduced	77%	73%	83%	-37%	—	85%	—	65%	83%	—	77%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.17	1.14	1.91	< 0.005	0.04	0.02	0.06	0.04	< 0.005	0.05	—	450	450	0.02	< 0.005	0.02	452
Mit.	0.05	0.05	0.22	2.63	< 0.005	0.01	0.02	0.02	0.01	< 0.005	0.01	—	450	450	0.02	< 0.005	0.02	452
% Reduced	76%	72%	81%	-37%	—	82%	—	60%	80%	—	73%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.21	0.35	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	74.6	74.6	< 0.005	< 0.005	< 0.005	74.8
Mit.	0.01	0.01	0.04	0.48	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	74.6	74.6	< 0.005	< 0.005	< 0.005	74.8
% Reduced	76%	72%	81%	-37%	—	82%	—	60%	80%	—	73%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.54	1.30	9.46	14.1	0.03	0.39	0.12	0.51	0.36	0.03	0.39	—	3,300	3,300	0.13	0.03	0.44	3,313
2027	1.50	1.27	8.88	14.1	0.03	0.36	0.12	0.48	0.33	0.03	0.36	—	3,298	3,298	0.13	0.03	0.39	3,311
2028	1.46	1.24	8.29	14.1	0.03	0.33	0.12	0.45	0.30	0.03	0.33	—	3,297	3,297	0.13	0.03	0.35	3,309
2029	1.43	1.20	7.78	14.0	0.03	0.30	0.12	0.42	0.28	0.03	0.30	—	3,295	3,295	0.13	0.03	0.31	3,306
2030	2.77	2.34	14.8	28.0	0.06	0.56	0.24	0.80	0.52	0.06	0.57	—	6,585	6,585	0.26	0.05	0.55	6,608
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.54	1.29	9.47	14.0	0.03	0.39	0.12	0.51	0.36	0.03	0.39	—	3,288	3,288	0.13	0.03	0.01	3,301
2027	1.50	1.26	8.89	14.0	0.03	0.36	0.12	0.48	0.33	0.03	0.36	—	3,286	3,286	0.13	0.03	0.01	3,299
2028	1.46	1.23	8.29	14.0	0.03	0.33	0.12	0.45	0.30	0.03	0.33	—	3,285	3,285	0.13	0.03	0.01	3,297
2029	1.43	1.20	7.79	13.9	0.03	0.30	0.12	0.42	0.28	0.03	0.30	—	3,283	3,283	0.13	0.03	0.01	3,296
2030	1.38	1.17	7.41	13.9	0.03	0.28	0.12	0.40	0.26	0.03	0.29	—	3,281	3,281	0.13	0.03	0.01	3,294
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.65	0.96	< 0.005	0.03	0.01	0.03	0.02	< 0.005	0.03	—	225	225	0.01	< 0.005	0.01	226
2027	0.05	0.05	0.32	0.50	< 0.005	0.01	< 0.005	0.02	0.01	< 0.005	0.01	—	117	117	< 0.005	< 0.005	0.01	118
2028	0.20	0.17	1.14	1.91	< 0.005	0.04	0.02	0.06	0.04	< 0.005	0.05	—	450	450	0.02	< 0.005	0.02	452

2029	0.15	0.12	0.81	1.45	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	342	342	0.01	< 0.005	0.01	343
2030	0.09	0.08	0.51	0.95	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	225	225	0.01	< 0.005	0.01	226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.02	0.12	0.18	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	37.3	37.3	< 0.005	< 0.005	< 0.005	37.5
2027	0.01	0.01	0.06	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	19.4	19.4	< 0.005	< 0.005	< 0.005	19.5
2028	0.04	0.03	0.21	0.35	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	74.6	74.6	< 0.005	< 0.005	< 0.005	74.8
2029	0.03	0.02	0.15	0.26	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	56.6	56.6	< 0.005	< 0.005	< 0.005	56.9
2030	0.02	0.01	0.09	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.2	37.2	< 0.005	< 0.005	< 0.005	37.4

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.36	0.35	1.59	19.4	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,300	3,300	0.13	0.03	0.44	3,313
2027	0.36	0.35	1.59	19.3	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,298	3,298	0.13	0.03	0.39	3,311
2028	0.35	0.35	1.59	19.3	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,297	3,297	0.13	0.03	0.35	3,309
2029	0.35	0.34	1.58	19.3	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,295	3,295	0.13	0.03	0.31	3,306
2030	0.69	0.68	3.16	38.4	0.06	0.12	0.24	0.36	0.12	0.06	0.17	—	6,585	6,585	0.26	0.05	0.55	6,608
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.36	0.35	1.60	19.2	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,288	3,288	0.13	0.03	0.01	3,301
2027	0.35	0.35	1.60	19.2	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,286	3,286	0.13	0.03	0.01	3,299
2028	0.35	0.34	1.59	19.2	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,285	3,285	0.13	0.03	0.01	3,297
2029	0.34	0.34	1.59	19.1	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,283	3,283	0.13	0.03	0.01	3,296
2030	0.34	0.34	1.59	19.1	0.03	0.06	0.12	0.18	0.06	0.03	0.09	—	3,281	3,281	0.13	0.03	0.01	3,294
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.02	0.02	0.11	1.32	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	225	225	0.01	< 0.005	0.01	226
2027	0.01	0.01	0.06	0.68	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	117	117	< 0.005	< 0.005	0.01	118
2028	0.05	0.05	0.22	2.63	< 0.005	0.01	0.02	0.02	0.01	< 0.005	0.01	—	450	450	0.02	< 0.005	0.02	452
2029	0.04	0.04	0.17	1.99	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	342	342	0.01	< 0.005	0.01	343
2030	0.02	0.02	0.11	1.31	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	225	225	0.01	< 0.005	0.01	226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.02	0.24	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.3	37.3	< 0.005	< 0.005	< 0.005	37.5
2027	< 0.005	< 0.005	0.01	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	19.4	19.4	< 0.005	< 0.005	< 0.005	19.5
2028	0.01	0.01	0.04	0.48	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	74.6	74.6	< 0.005	< 0.005	< 0.005	74.8
2029	0.01	0.01	0.03	0.36	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	56.6	56.6	< 0.005	< 0.005	< 0.005	56.9
2030	< 0.005	< 0.005	0.02	0.24	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.2	37.2	< 0.005	< 0.005	< 0.005	37.4

3. Construction Emissions Details

3.1. ID 3 - restoration (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.48	1.24	9.42	13.5	0.03	0.39	—	0.39	0.36	—	0.36	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.26	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.22	3.22	< 0.005	< 0.005	0.01	3.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 3 - restoration (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.22	3.22	< 0.005	< 0.005	0.01	3.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 4- restoration (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.48	1.24	9.42	13.5	0.03	0.39	—	0.39	0.36	—	0.36	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.18	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 4- restoration (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 1-restoration (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.48	1.24	9.42	13.5	0.03	0.39	—	0.39	0.36	—	0.36	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.48	1.24	9.42	13.5	0.03	0.39	—	0.39	0.36	—	0.36	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.18	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 1-restoration (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 5-restoration (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.48	1.24	9.42	13.5	0.03	0.39	—	0.39	0.36	—	0.36	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.18	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 5-restoration (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 12- restoration (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	8.85	13.5	0.03	0.36	—	0.36	0.33	—	0.33	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.24	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.63	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.39	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.17	3.17	< 0.005	< 0.005	< 0.005	3.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 12- restoration (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.63	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.39	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.17	3.17	< 0.005	< 0.005	< 0.005	3.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 2- restoration (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	8.85	13.5	0.03	0.36	—	0.36	0.33	—	0.33	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.01	0.01	0.07	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.1	26.1	< 0.005	< 0.005	—	26.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.32	4.32	< 0.005	< 0.005	—	4.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 2- restoration (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.1	26.1	< 0.005	< 0.005	—	26.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.32	4.32	< 0.005	< 0.005	—	4.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. ID 15- restoration (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.19	8.26	13.5	0.03	0.33	—	0.33	0.30	—	0.30	—	3,174	3,174	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.57	0.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	217	217	0.01	< 0.005	—	218
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.0	36.0	< 0.005	< 0.005	—	36.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.35	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.77	7.77	< 0.005	< 0.005	0.01	7.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. ID 15- restoration (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	1.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	217	217	0.01	< 0.005	—	218
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.0	36.0	< 0.005	< 0.005	—	36.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.35	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.77	7.77	< 0.005	< 0.005	0.01	7.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. ID 7- restoration (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.19	8.26	13.5	0.03	0.33	—	0.33	0.30	—	0.30	—	3,174	3,174	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.41	1.19	8.26	13.5	0.03	0.33	—	0.33	0.30	—	0.30	—	3,174	3,174	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.10	0.08	0.57	0.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	217	217	0.01	< 0.005	—	218
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.10	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.0	36.0	< 0.005	< 0.005	—	36.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.35	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.77	7.77	< 0.005	< 0.005	0.01	7.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. ID 7- restoration (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,174	3,174	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.02	0.02	0.11	1.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	217	217	0.01	< 0.005	—	218
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.0	36.0	< 0.005	< 0.005	—	36.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.35	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.77	7.77	< 0.005	< 0.005	0.01	7.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. ID 8.b -restoration (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	7.76	13.5	0.03	0.30	—	0.30	0.28	—	0.28	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.21	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.31	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.05	3.05	< 0.005	< 0.005	< 0.005	3.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. ID 8.b -restoration (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.31	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.05	3.05	< 0.005	< 0.005	< 0.005	3.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. ID 8.c- restoration (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	7.76	13.5	0.03	0.30	—	0.30	0.28	—	0.28	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.31	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.53	1.53	< 0.005	< 0.005	< 0.005	1.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. ID 8.c- restoration (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.31	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.53	1.53	< 0.005	< 0.005	< 0.005	1.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. ID 8.a- restoration (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	7.76	13.5	0.03	0.30	—	0.30	0.28	—	0.28	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.49	0.85	< 0.005	0.02	—	0.02	0.02	—	0.02	—	200	200	0.01	< 0.005	—	201
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.02	0.01	0.09	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.1	33.1	< 0.005	< 0.005	—	33.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.02	7.02	< 0.005	< 0.005	0.01	7.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. ID 8.a- restoration (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	200	200	0.01	< 0.005	—	201
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.1	33.1	< 0.005	< 0.005	—	33.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.02	7.02	< 0.005	< 0.005	0.01	7.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. ID 8.e- restoration (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	7.38	13.5	0.03	0.28	—	0.28	0.26	—	0.26	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. ID 8.e- restoration (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. ID 6- restoration (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	7.38	13.5	0.03	0.28	—	0.28	0.26	—	0.26	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.20	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.01	0.01	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.00	3.00	< 0.005	< 0.005	< 0.005	3.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. ID 6- restoration (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01	0.01	0.04	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.00	3.00	< 0.005	< 0.005	< 0.005	3.04

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. ID 8d- restoration (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	7.38	13.5	0.03	0.28	—	0.28	0.26	—	0.26	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. ID 8d- restoration (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. ID 11- Restoration (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	7.38	13.5	0.03	0.28	—	0.28	0.26	—	0.26	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	7.38	13.5	0.03	0.28	—	0.28	0.26	—	0.26	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.10	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.01	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. ID 11- Restoration (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.5	43.5	< 0.005	< 0.005	—	43.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.20	7.20	< 0.005	< 0.005	—	7.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.01	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 3 - restoration	Building Construction	6/7/2026	6/20/2026	5.00	10.0	—
ID 4- restoration	Building Construction	8/15/2026	8/21/2026	5.00	5.00	—
ID 1-restoration	Building Construction	9/26/2026	10/2/2026	5.00	5.00	—
ID 5-restoration	Building Construction	12/14/2026	12/20/2026	5.00	5.00	—
ID 12- restoration	Building Construction	5/2/2027	5/15/2027	5.00	10.0	—
ID 2- restoration	Building Construction	10/14/2027	10/18/2027	5.00	3.00	—
ID 15- restoration	Building Construction	5/20/2028	6/23/2028	5.00	25.0	—
ID 7- restoration	Building Construction	9/10/2028	10/14/2028	5.00	25.0	—
ID 8.b -restoration	Building Construction	8/12/2029	8/25/2029	5.00	10.0	—
ID 8.c- restoration	Building Construction	9/23/2029	9/29/2029	5.00	5.00	—
ID 8.a- restoration	Building Construction	10/19/2029	11/20/2029	5.00	23.0	—
ID 8.e- restoration	Building Construction	8/24/2030	8/30/2030	5.00	5.00	—
ID 6- restoration	Building Construction	9/10/2030	9/23/2030	5.00	10.0	—
ID 8d- restoration	Building Construction	9/22/2030	9/28/2030	5.00	5.00	—
ID 11- Restoration	Building Construction	9/30/2030	10/6/2030	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3 - restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 3 - restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 3 - restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 3 - restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 4- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 4- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 4- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 4- restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 1-restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 1-restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 1-restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 1-restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 5-restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 5-restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 5-restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 5-restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 12- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 12- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38

ID 12- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 12- restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 2- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 2- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 2- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 2- restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 15- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 15- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 15- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 15- restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 7- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 7- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 7- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 7- restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.b -restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.b -restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 8.b -restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.b -restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.c- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.c- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 8.c- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40

ID 8.c- restoration	Tractors/Loaders/Back	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.a- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.a- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 8.a- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.a- restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.e- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.e- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 8.e- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.e- restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 6- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 6- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 6- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 6- restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8d- restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8d- restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 8d- restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8d- restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 11- Restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 11- Restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
ID 11- Restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 11- Restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3 - restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 3 - restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 3 - restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 3 - restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 4- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 4- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 4- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 4- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 1-restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 1-restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 1-restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 1-restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 5-restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 5-restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 5-restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 5-restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 12- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 12- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 12- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40

ID 12- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 2- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 2- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 2- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 2- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 15- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 15- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 15- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 15- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 7- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 7- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 7- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 7- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.b -restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.b -restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 8.b -restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.b -restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.c- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.c- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 8.c- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.c- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

ID 8.a- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.a- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 8.a- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.a- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.e- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.e- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 8.e- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.e- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 6- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 6- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 6- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 6- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8d- restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8d- restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 8d- restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8d- restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 11- Restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 11- Restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
ID 11- Restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 11- Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3 - restoration	—	—	—	—
ID 3 - restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 3 - restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 3 - restoration	Hauling	0.00	20.0	HHDT
ID 3 - restoration	Onsite truck	—	—	HHDT
ID 4- restoration	—	—	—	—
ID 4- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 4- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 4- restoration	Hauling	0.00	20.0	HHDT
ID 4- restoration	Onsite truck	—	—	HHDT
ID 1-restoration	—	—	—	—
ID 1-restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 1-restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 1-restoration	Hauling	0.00	20.0	HHDT
ID 1-restoration	Onsite truck	—	—	HHDT
ID 5-restoration	—	—	—	—
ID 5-restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 5-restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 5-restoration	Hauling	0.00	20.0	HHDT
ID 5-restoration	Onsite truck	—	—	HHDT
ID 12- restoration	—	—	—	—
ID 12- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 12- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 12- restoration	Hauling	0.00	20.0	HHDT
ID 12- restoration	Onsite truck	—	—	HHDT
ID 2- restoration	—	—	—	—

ID 2- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 2- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 2- restoration	Hauling	0.00	20.0	HHDT
ID 2- restoration	Onsite truck	—	—	HHDT
ID 15- restoration	—	—	—	—
ID 15- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 15- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 15- restoration	Hauling	0.00	20.0	HHDT
ID 15- restoration	Onsite truck	—	—	HHDT
ID 7- restoration	—	—	—	—
ID 7- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 7- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 7- restoration	Hauling	0.00	20.0	HHDT
ID 7- restoration	Onsite truck	—	—	HHDT
ID 8.b -restoration	—	—	—	—
ID 8.b -restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.b -restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.b -restoration	Hauling	0.00	20.0	HHDT
ID 8.b -restoration	Onsite truck	—	—	HHDT
ID 8.c- restoration	—	—	—	—
ID 8.c- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.c- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.c- restoration	Hauling	0.00	20.0	HHDT
ID 8.c- restoration	Onsite truck	—	—	HHDT
ID 8.a- restoration	—	—	—	—
ID 8.a- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.a- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.a- restoration	Hauling	0.00	20.0	HHDT

ID 8.a- restoration	Onsite truck	—	—	HHDT
ID 8.e- restoration	—	—	—	—
ID 8.e- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.e- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.e- restoration	Hauling	0.00	20.0	HHDT
ID 8.e- restoration	Onsite truck	—	—	HHDT
ID 6- restoration	—	—	—	—
ID 6- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 6- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 6- restoration	Hauling	0.00	20.0	HHDT
ID 6- restoration	Onsite truck	—	—	HHDT
ID 8d- restoration	—	—	—	—
ID 8d- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8d- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8d- restoration	Hauling	0.00	20.0	HHDT
ID 8d- restoration	Onsite truck	—	—	HHDT
ID 11- Restoration	—	—	—	—
ID 11- Restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 11- Restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 11- Restoration	Hauling	0.00	20.0	HHDT
ID 11- Restoration	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3 - restoration	—	—	—	—
ID 3 - restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 3 - restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 3 - restoration	Hauling	0.00	20.0	HHDT

ID 3 - restoration	Onsite truck	—	—	HHDT
ID 4- restoration	—	—	—	—
ID 4- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 4- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 4- restoration	Hauling	0.00	20.0	HHDT
ID 4- restoration	Onsite truck	—	—	HHDT
ID 1-restoration	—	—	—	—
ID 1-restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 1-restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 1-restoration	Hauling	0.00	20.0	HHDT
ID 1-restoration	Onsite truck	—	—	HHDT
ID 5-restoration	—	—	—	—
ID 5-restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 5-restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 5-restoration	Hauling	0.00	20.0	HHDT
ID 5-restoration	Onsite truck	—	—	HHDT
ID 12- restoration	—	—	—	—
ID 12- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 12- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 12- restoration	Hauling	0.00	20.0	HHDT
ID 12- restoration	Onsite truck	—	—	HHDT
ID 2- restoration	—	—	—	—
ID 2- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 2- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 2- restoration	Hauling	0.00	20.0	HHDT
ID 2- restoration	Onsite truck	—	—	HHDT
ID 15- restoration	—	—	—	—
ID 15- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2

ID 15- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 15- restoration	Hauling	0.00	20.0	HHDT
ID 15- restoration	Onsite truck	—	—	HHDT
ID 7- restoration	—	—	—	—
ID 7- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 7- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 7- restoration	Hauling	0.00	20.0	HHDT
ID 7- restoration	Onsite truck	—	—	HHDT
ID 8.b -restoration	—	—	—	—
ID 8.b -restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.b -restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.b -restoration	Hauling	0.00	20.0	HHDT
ID 8.b -restoration	Onsite truck	—	—	HHDT
ID 8.c- restoration	—	—	—	—
ID 8.c- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.c- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.c- restoration	Hauling	0.00	20.0	HHDT
ID 8.c- restoration	Onsite truck	—	—	HHDT
ID 8.a- restoration	—	—	—	—
ID 8.a- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.a- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.a- restoration	Hauling	0.00	20.0	HHDT
ID 8.a- restoration	Onsite truck	—	—	HHDT
ID 8.e- restoration	—	—	—	—
ID 8.e- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.e- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8.e- restoration	Hauling	0.00	20.0	HHDT
ID 8.e- restoration	Onsite truck	—	—	HHDT

ID 6- restoration	—	—	—	—
ID 6- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 6- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 6- restoration	Hauling	0.00	20.0	HHDT
ID 6- restoration	Onsite truck	—	—	HHDT
ID 8d- restoration	—	—	—	—
ID 8d- restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8d- restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 8d- restoration	Hauling	0.00	20.0	HHDT
ID 8d- restoration	Onsite truck	—	—	HHDT
ID 11- Restoration	—	—	—	—
ID 11- Restoration	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 11- Restoration	Vendor	0.00	9.10	HHDT,MHDT
ID 11- Restoration	Hauling	0.00	20.0	HHDT
ID 11- Restoration	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Aggregate and Asphalt paving
Construction Start Date	6/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.819474527041905, -121.32108988212136
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.42	1.20	9.33	14.8	0.03	0.32	0.24	0.56	0.30	0.06	0.35	—	3,298	3,298	0.13	0.03	0.55	3,310
Mit.	0.42	0.41	4.23	19.7	0.03	0.06	0.24	0.29	0.06	0.06	0.11	—	3,298	3,298	0.13	0.03	0.55	3,310
% Reduced	70%	66%	55%	-33%	—	82%	—	48%	81%	—	68%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.44	1.22	10.2	15.7	0.02	0.37	0.24	0.61	0.34	0.06	0.40	—	2,460	2,460	0.10	0.03	0.02	2,470
Mit.	0.34	0.33	4.15	16.6	0.02	0.04	0.24	0.28	0.04	0.06	0.10	—	2,460	2,460	0.10	0.03	0.02	2,470
% Reduced	76%	73%	60%	-5%	—	89%	—	55%	88%	—	76%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.28	0.43	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	67.5	67.5	< 0.005	< 0.005	0.01	67.8
Mit.	0.01	0.01	0.11	0.45	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	67.5	67.5	< 0.005	< 0.005	0.01	67.8
% Reduced	76%	73%	60%	-5%	—	89%	—	55%	88%	—	76%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.05	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	< 0.005	11.2
Mit.	< 0.005	< 0.005	0.02	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	< 0.005	11.2
% Reduced	76%	73%	60%	-5%	—	89%	—	55%	88%	—	76%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.82	0.69	5.57	8.12	0.01	0.25	0.12	0.36	0.23	0.03	0.25	—	1,248	1,248	0.05	0.01	0.44	1,254
2027	0.65	0.55	4.37	6.59	0.01	0.18	0.12	0.30	0.17	0.03	0.20	—	1,022	1,022	0.04	0.01	0.39	1,027
2028	0.60	0.51	4.19	6.52	0.01	0.16	0.12	0.28	0.15	0.03	0.17	—	1,020	1,020	0.04	0.01	0.35	1,024
2029	0.72	0.61	5.11	7.98	0.01	0.19	0.12	0.30	0.17	0.03	0.20	—	1,241	1,241	0.05	0.01	0.31	1,246
2030	1.42	1.20	9.33	14.8	0.03	0.32	0.24	0.56	0.30	0.06	0.35	—	3,298	3,298	0.13	0.03	0.55	3,310
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.66	0.56	4.48	6.49	0.01	0.20	0.12	0.31	0.18	0.03	0.21	—	1,012	1,012	0.04	0.01	0.01	1,016
2027	0.64	0.54	4.38	6.46	0.01	0.18	0.12	0.30	0.17	0.03	0.20	—	1,010	1,010	0.04	0.01	0.01	1,015
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	1.44	1.22	10.2	15.7	0.02	0.37	0.24	0.61	0.34	0.06	0.40	—	2,460	2,460	0.10	0.03	0.02	2,470
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.02	0.13	0.18	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	28.1	28.1	< 0.005	< 0.005	< 0.005	28.2
2027	0.01	0.01	0.06	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	< 0.005	13.9
2028	0.02	0.02	0.14	0.21	< 0.005	0.01	< 0.005	0.01	< 0.005	< 0.005	0.01	—	33.2	33.2	< 0.005	< 0.005	< 0.005	33.4

2029	0.04	0.03	0.28	0.43	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	67.5	67.5	< 0.005	< 0.005	0.01	67.8
2030	0.02	0.02	0.15	0.24	< 0.005	0.01	< 0.005	0.01	< 0.005	< 0.005	0.01	—	53.9	53.9	< 0.005	< 0.005	< 0.005	54.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.65	4.65	< 0.005	< 0.005	< 0.005	4.67
2027	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.31
2028	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.50	5.50	< 0.005	< 0.005	< 0.005	5.53
2029	0.01	0.01	0.05	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	< 0.005	11.2
2030	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.93	8.93	< 0.005	< 0.005	< 0.005	8.97

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.19	0.18	2.07	8.54	0.01	0.02	0.12	0.14	0.02	0.03	0.05	—	1,248	1,248	0.05	0.01	0.44	1,254
2027	0.16	0.15	1.66	6.92	0.01	0.02	0.12	0.13	0.02	0.03	0.04	—	1,022	1,022	0.04	0.01	0.39	1,027
2028	0.15	0.15	1.66	6.87	0.01	0.02	0.12	0.13	0.02	0.03	0.04	—	1,020	1,020	0.04	0.01	0.35	1,024
2029	0.17	0.17	2.06	8.41	0.01	0.02	0.12	0.14	0.02	0.03	0.05	—	1,241	1,241	0.05	0.01	0.31	1,246
2030	0.42	0.41	4.23	19.7	0.03	0.06	0.24	0.29	0.06	0.06	0.11	—	3,298	3,298	0.13	0.03	0.55	3,310
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.16	0.15	1.67	6.82	0.01	0.02	0.12	0.13	0.02	0.03	0.04	—	1,012	1,012	0.04	0.01	0.01	1,016
2027	0.15	0.15	1.67	6.78	0.01	0.02	0.12	0.13	0.02	0.03	0.04	—	1,010	1,010	0.04	0.01	0.01	1,015
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	0.34	0.33	4.15	16.6	0.02	0.04	0.24	0.28	0.04	0.06	0.10	—	2,460	2,460	0.10	0.03	0.02	2,470
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	< 0.005	< 0.005	0.05	0.19	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	28.1	28.1	< 0.005	< 0.005	< 0.005	28.2
2027	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	< 0.005	13.9
2028	< 0.005	< 0.005	0.05	0.22	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	33.2	33.2	< 0.005	< 0.005	< 0.005	33.4
2029	0.01	0.01	0.11	0.45	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	67.5	67.5	< 0.005	< 0.005	0.01	67.8
2030	0.01	0.01	0.07	0.32	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	53.9	53.9	< 0.005	< 0.005	< 0.005	54.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.65	4.65	< 0.005	< 0.005	< 0.005	4.67
2027	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.31
2028	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.50	5.50	< 0.005	< 0.005	< 0.005	5.53
2029	< 0.005	< 0.005	0.02	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	< 0.005	11.2
2030	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.93	8.93	< 0.005	< 0.005	< 0.005	8.97

3. Construction Emissions Details

3.1. ID 8.a - aggregate base (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.09	7.43	0.01	0.19	—	0.19	0.17	—	0.17	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6	24.6	< 0.005	< 0.005	—	24.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.07	4.07	< 0.005	< 0.005	—	4.08
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 8.a - aggregate base (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.04	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6	24.6	< 0.005	< 0.005	—	24.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.07	4.07	< 0.005	< 0.005	—	4.08
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 11- aggregate base and asphalt pavement (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.31	6.41	0.02	0.15	—	0.15	0.14	—	0.14	—	1,941	1,941	0.08	0.02	—	1,947
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.9	31.9	< 0.005	< 0.005	—	32.0
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.28	5.28	< 0.005	< 0.005	—	5.30
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 11- aggregate base and asphalt pavement (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.15	10.8	0.02	0.04	—	0.04	0.04	—	0.04	—	1,941	1,941	0.08	0.02	—	1,947
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.9	31.9	< 0.005	< 0.005	—	32.0
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.28	5.28	< 0.005	< 0.005	—	5.30
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 12- aggregate base (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.34	5.97	0.01	0.18	—	0.18	0.17	—	0.17	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.37	7.37	< 0.005	< 0.005	—	7.40
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.22	1.22	< 0.005	< 0.005	—	1.23

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.63	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.39	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 12- aggregate base (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.63	6.29	0.01	0.02	—	0.02	0.02	—	0.02	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.37	7.37	< 0.005	< 0.005	—	7.40
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.22	1.22	< 0.005	< 0.005	—	1.23
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.63	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.39	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 15- aggreagte base and asphalt pavement (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.55	0.46	4.16	5.94	0.01	0.16	—	0.16	0.15	—	0.15	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.20	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.88	4.88	< 0.005	< 0.005	—	4.90
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.35	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	< 0.005	3.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 15- aggreagte base and asphalt pavement (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.63	6.29	0.01	0.02	—	0.02	0.02	—	0.02	—	897	897	0.04	0.01	—	900

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.88	4.88	< 0.005	< 0.005	—	4.90
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.35	124

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	< 0.005	3.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 1-Aggregate base (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	4.43	5.96	0.01	0.20	—	0.20	0.18	—	0.18	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.91	4.91	< 0.005	< 0.005	—	4.93
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.82
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 1-Aggregate base (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.63	6.29	0.01	0.02	—	0.02	0.02	—	0.02	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.91	4.91	< 0.005	< 0.005	—	4.93
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.82
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 2-aggregate base (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.34	5.97	0.01	0.18	—	0.18	0.17	—	0.17	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.92	4.92	< 0.005	< 0.005	—	4.93
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.82
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 2-aggregate base (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.63	6.29	0.01	0.02	—	0.02	0.02	—	0.02	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.92	4.92	< 0.005	< 0.005	—	4.93
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.82
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. ID 3- aggregate base (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.64	5.54	7.45	0.01	0.25	—	0.25	0.23	—	0.23	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.21	9.21	< 0.005	< 0.005	—	9.25
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.53	1.53	< 0.005	< 0.005	—	1.53
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. ID 3- aggregate base (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.21	9.21	< 0.005	< 0.005	—	9.25
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Architectural Coating	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.53	1.53	< 0.005	< 0.005	—	1.53
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. ID 4- aggregate base (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.64	5.54	7.45	0.01	0.25	—	0.25	0.23	—	0.23	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. ID 4- aggregate base (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.44	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. ID 5- aggregate base (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	4.43	5.96	0.01	0.20	—	0.20	0.18	—	0.18	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.91	4.91	< 0.005	< 0.005	—	4.93
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.82

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. ID 5- aggregate base (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.63	6.29	0.01	0.02	—	0.02	0.02	—	0.02	—	897	897	0.04	0.01	—	900
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.91	4.91	< 0.005	< 0.005	—	4.93
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.82
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. ID 6- aggregate base (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.65	0.54	4.97	7.41	0.01	0.17	—	0.17	0.16	—	0.16	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. ID 6- aggregate base (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. ID 7- aggregate base and asphalt pavement (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.09	7.43	0.01	0.19	—	0.19	0.17	—	0.17	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6	24.6	< 0.005	< 0.005	—	24.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.07	4.07	< 0.005	< 0.005	—	4.08
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. ID 7- aggregate base and asphalt pavement (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.04	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6	24.6	< 0.005	< 0.005	—	24.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.07	4.07	< 0.005	< 0.005	—	4.08
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. ID 8.b -aggregate base and asphalt pavement (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.09	7.43	0.01	0.19	—	0.19	0.17	—	0.17	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.3
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.03	2.03	< 0.005	< 0.005	—	2.04
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.31	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. ID 8.b -aggregate base and asphalt pavement (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.3
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.03	2.03	< 0.005	< 0.005	—	2.04
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.31	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. ID 8.d- aggregate base (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.97	7.41	0.01	0.17	—	0.17	0.16	—	0.16	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. ID 8.d- aggregate base (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. ID 8.e- aggregate base (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.65	0.54	4.97	7.41	0.01	0.17	—	0.17	0.16	—	0.16	—	1,121	1,121	0.05	0.01	—	1,125
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. ID 8.e- aggregate base (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.14	6.14	< 0.005	< 0.005	—	6.16
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.02	1.02	< 0.005	< 0.005	—	1.02
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 8.a - aggregate base	Site Preparation	10/8/2029	10/17/2029	5.00	8.00	—
ID 11- aggregate base and asphalt pavement	Site Preparation	9/22/2030	9/30/2030	5.00	6.00	—
ID 12- aggregate base	Site Preparation	4/29/2027	5/3/2027	5.00	3.00	—
ID 15- aggreagte base and asphalt pavement	Site Preparation	5/2/2028	5/17/2028	5.00	12.0	—
ID 1-Aggregate base	Site Preparation	9/22/2026	9/23/2026	5.00	2.00	—
ID 2-aggregate base	Site Preparation	10/10/2027	10/12/2027	5.00	2.00	—
ID 3- aggregate base	Site Preparation	6/2/2026	6/4/2026	5.00	3.00	—
ID 4- aggregate base	Site Preparation	8/11/2026	8/12/2026	5.00	2.00	—
ID 5- aggregate base	Site Preparation	12/12/2026	12/15/2026	5.00	2.00	—
ID 6- aggregate base	Site Preparation	9/8/2030	9/10/2030	5.00	2.00	—
ID 7- aggregate base and asphalt pavement	Site Preparation	10/8/2029	10/17/2029	5.00	8.00	—
ID 8.b -aggregate base and asphalt pavement	Site Preparation	8/6/2029	8/9/2029	5.00	4.00	—
ID 8.d- aggregate base	Site Preparation	9/20/2030	9/23/2030	5.00	2.00	—
ID 8.e- aggregate base	Site Preparation	8/20/2030	8/21/2030	5.00	2.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 8.a - aggregate base	Pavers	Diesel	Average	1.00	10.0	81.0	0.42

ID 8.a - aggregate base	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 8.a - aggregate base	Rollers	Diesel	Average	2.00	10.0	36.0	0.38
ID 11- aggregate base and asphalt pavement	Pavers	Diesel	Average	1.00	8.00	367	0.40
ID 11- aggregate base and asphalt pavement	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
ID 11- aggregate base and asphalt pavement	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 12- aggregate base	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
ID 12- aggregate base	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
ID 12- aggregate base	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 15- aggreagte base and asphalt pavement	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
ID 15- aggreagte base and asphalt pavement	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
ID 15- aggreagte base and asphalt pavement	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 1-Aggregate base	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
ID 1-Aggregate base	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
ID 1-Aggregate base	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 2-aggregate base	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
ID 2-aggregate base	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
ID 2-aggregate base	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 3- aggregate base	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
ID 3- aggregate base	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 3- aggregate base	Rollers	Diesel	Average	2.00	10.0	36.0	0.38
ID 4- aggregate base	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
ID 4- aggregate base	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 4- aggregate base	Rollers	Diesel	Average	2.00	10.0	36.0	0.38

ID 5- aggregate base	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
ID 5- aggregate base	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
ID 5- aggregate base	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 6- aggregate base	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
ID 6- aggregate base	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 6- aggregate base	Rollers	Diesel	Average	2.00	10.0	36.0	0.38
ID 7- aggregate base and asphalt pavement	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
ID 7- aggregate base and asphalt pavement	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 7- aggregate base and asphalt pavement	Rollers	Diesel	Average	2.00	10.0	36.0	0.38
ID 8.b -aggregate base and asphalt pavement	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
ID 8.b -aggregate base and asphalt pavement	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 8.b -aggregate base and asphalt pavement	Rollers	Diesel	Average	2.00	10.0	36.0	0.38
ID 8.d- aggregate base	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
ID 8.d- aggregate base	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 8.d- aggregate base	Rollers	Diesel	Average	2.00	10.0	36.0	0.38
ID 8.e- aggregate base	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
ID 8.e- aggregate base	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
ID 8.e- aggregate base	Rollers	Diesel	Average	2.00	10.0	36.0	0.38

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 8.a - aggregate base	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
ID 8.a - aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
ID 8.a - aggregate base	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 11- aggregate base and asphalt pavement	Pavers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
ID 11- aggregate base and asphalt pavement	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
ID 11- aggregate base and asphalt pavement	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 12- aggregate base	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
ID 12- aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
ID 12- aggregate base	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 15- aggreagte base and asphalt pavement	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
ID 15- aggreagte base and asphalt pavement	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
ID 15- aggreagte base and asphalt pavement	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 1-Aggregate base	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
ID 1-Aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
ID 1-Aggregate base	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 2-aggregate base	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
ID 2-aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
ID 2-aggregate base	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 3- aggregate base	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
ID 3- aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36

ID 3- aggregate base	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 4- aggregate base	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
ID 4- aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
ID 4- aggregate base	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 5- aggregate base	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
ID 5- aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
ID 5- aggregate base	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 6- aggregate base	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
ID 6- aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
ID 6- aggregate base	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 7- aggregate base and asphalt pavement	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
ID 7- aggregate base and asphalt pavement	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
ID 7- aggregate base and asphalt pavement	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 8.b -aggregate base and asphalt pavement	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
ID 8.b -aggregate base and asphalt pavement	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
ID 8.b -aggregate base and asphalt pavement	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 8.d- aggregate base	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
ID 8.d- aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
ID 8.d- aggregate base	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
ID 8.e- aggregate base	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42

ID 8.e- aggregate base	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
ID 8.e- aggregate base	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 11- aggregate base and asphalt pavement	—	—	—	—
ID 11- aggregate base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 11- aggregate base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT
ID 11- aggregate base and asphalt pavement	Hauling	0.00	20.0	HHDT
ID 11- aggregate base and asphalt pavement	Onsite truck	—	—	HHDT
ID 12- aggregate base	—	—	—	—
ID 12- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 12- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 12- aggregate base	Hauling	0.00	20.0	HHDT
ID 12- aggregate base	Onsite truck	—	—	HHDT
ID 15- aggreagte base and asphalt pavement	—	—	—	—
ID 15- aggreagte base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 15- aggreagte base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT
ID 15- aggreagte base and asphalt pavement	Hauling	0.00	20.0	HHDT

ID 15- aggreagte base and asphalt pavement	Onsite truck	—	—	HHDT
ID 1-Aggregate base	—	—	—	—
ID 1-Aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 1-Aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 1-Aggregate base	Hauling	0.00	20.0	HHDT
ID 1-Aggregate base	Onsite truck	—	—	HHDT
ID 2-aggregate base	—	—	—	—
ID 2-aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 2-aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 2-aggregate base	Hauling	0.00	20.0	HHDT
ID 2-aggregate base	Onsite truck	—	—	HHDT
ID 3- aggregate base	—	—	—	—
ID 3- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 3- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 3- aggregate base	Hauling	0.00	20.0	HHDT
ID 3- aggregate base	Onsite truck	—	—	HHDT
ID 8.a - aggregate base	—	—	—	—
ID 8.a - aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.a - aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 8.a - aggregate base	Hauling	0.00	20.0	HHDT
ID 8.a - aggregate base	Onsite truck	—	—	HHDT
ID 4- aggregate base	—	—	—	—
ID 4- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 4- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 4- aggregate base	Hauling	0.00	20.0	HHDT
ID 4- aggregate base	Onsite truck	—	—	HHDT
ID 5- aggregate base	—	—	—	—
ID 5- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2

ID 5- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 5- aggregate base	Hauling	0.00	20.0	HHDT
ID 5- aggregate base	Onsite truck	—	—	HHDT
ID 6- aggregate base	—	—	—	—
ID 6- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 6- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 6- aggregate base	Hauling	0.00	20.0	HHDT
ID 6- aggregate base	Onsite truck	—	—	HHDT
ID 7- aggregate base and asphalt pavement	—	—	—	—
ID 7- aggregate base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 7- aggregate base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT
ID 7- aggregate base and asphalt pavement	Hauling	0.00	20.0	HHDT
ID 7- aggregate base and asphalt pavement	Onsite truck	—	—	HHDT
ID 8.b -aggregate base and asphalt pavement	—	—	—	—
ID 8.b -aggregate base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.b -aggregate base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT
ID 8.b -aggregate base and asphalt pavement	Hauling	0.00	20.0	HHDT
ID 8.b -aggregate base and asphalt pavement	Onsite truck	—	—	HHDT
ID 8.d- aggregate base	—	—	—	—
ID 8.d- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.d- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 8.d- aggregate base	Hauling	0.00	20.0	HHDT

ID 8.d- aggregate base	Onsite truck	—	—	HHDT
ID 8.e- aggregate base	—	—	—	—
ID 8.e- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.e- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 8.e- aggregate base	Hauling	0.00	20.0	HHDT
ID 8.e- aggregate base	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 11- aggregate base and asphalt pavement	—	—	—	—
ID 11- aggregate base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 11- aggregate base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT
ID 11- aggregate base and asphalt pavement	Hauling	0.00	20.0	HHDT
ID 11- aggregate base and asphalt pavement	Onsite truck	—	—	HHDT
ID 12- aggregate base	—	—	—	—
ID 12- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 12- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 12- aggregate base	Hauling	0.00	20.0	HHDT
ID 12- aggregate base	Onsite truck	—	—	HHDT
ID 15- aggreagte base and asphalt pavement	—	—	—	—
ID 15- aggreagte base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 15- aggreagte base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT

ID 15- aggreagte base and asphalt pavement	Hauling	0.00	20.0	HHDT
ID 15- aggreagte base and asphalt pavement	Onsite truck	—	—	HHDT
ID 1-Aggregate base	—	—	—	—
ID 1-Aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 1-Aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 1-Aggregate base	Hauling	0.00	20.0	HHDT
ID 1-Aggregate base	Onsite truck	—	—	HHDT
ID 2-aggregate base	—	—	—	—
ID 2-aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 2-aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 2-aggregate base	Hauling	0.00	20.0	HHDT
ID 2-aggregate base	Onsite truck	—	—	HHDT
ID 3- aggregate base	—	—	—	—
ID 3- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 3- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 3- aggregate base	Hauling	0.00	20.0	HHDT
ID 3- aggregate base	Onsite truck	—	—	HHDT
ID 8.a - aggregate base	—	—	—	—
ID 8.a - aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.a - aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 8.a - aggregate base	Hauling	0.00	20.0	HHDT
ID 8.a - aggregate base	Onsite truck	—	—	HHDT
ID 4- aggregate base	—	—	—	—
ID 4- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 4- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 4- aggregate base	Hauling	0.00	20.0	HHDT
ID 4- aggregate base	Onsite truck	—	—	HHDT

ID 5- aggregate base	—	—	—	—
ID 5- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 5- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 5- aggregate base	Hauling	0.00	20.0	HHDT
ID 5- aggregate base	Onsite truck	—	—	HHDT
ID 6- aggregate base	—	—	—	—
ID 6- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 6- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 6- aggregate base	Hauling	0.00	20.0	HHDT
ID 6- aggregate base	Onsite truck	—	—	HHDT
ID 7- aggregate base and asphalt pavement	—	—	—	—
ID 7- aggregate base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 7- aggregate base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT
ID 7- aggregate base and asphalt pavement	Hauling	0.00	20.0	HHDT
ID 7- aggregate base and asphalt pavement	Onsite truck	—	—	HHDT
ID 8.b -aggregate base and asphalt pavement	—	—	—	—
ID 8.b -aggregate base and asphalt pavement	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.b -aggregate base and asphalt pavement	Vendor	—	9.10	HHDT,MHDT
ID 8.b -aggregate base and asphalt pavement	Hauling	0.00	20.0	HHDT
ID 8.b -aggregate base and asphalt pavement	Onsite truck	—	—	HHDT
ID 8.d- aggregate base	—	—	—	—
ID 8.d- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2

ID 8.d- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 8.d- aggregate base	Hauling	0.00	20.0	HHDT
ID 8.d- aggregate base	Onsite truck	—	—	HHDT
ID 8.e- aggregate base	—	—	—	—
ID 8.e- aggregate base	Worker	14.0	11.9	LDA,LDT1,LDT2
ID 8.e- aggregate base	Vendor	—	9.10	HHDT,MHDT
ID 8.e- aggregate base	Hauling	0.00	20.0	HHDT
ID 8.e- aggregate base	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
ID 3- aggregate base	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 8.a - aggregate base	—	—	0.00	0.00	—
ID 11- aggregate base and asphalt pavement	—	—	0.00	0.00	—

ID 12- aggregate base	—	—	0.00	0.00	—
ID 15- aggreagte base and asphalt pavement	—	—	0.00	0.00	—
ID 1-Aggregate base	—	—	0.00	0.00	—
ID 2-aggregate base	—	—	0.00	0.00	—
ID 3- aggregate base	—	—	0.00	0.00	—
ID 4- aggregate base	—	—	0.00	0.00	—
ID 5- aggregate base	—	—	0.00	0.00	—
ID 6- aggregate base	—	—	0.00	0.00	—
ID 7- aggregate base and asphalt pavement	—	—	0.00	0.00	—
ID 8.b -aggregate base and asphalt pavement	—	—	0.00	0.00	—
ID 8.d- aggregate base	—	—	0.00	0.00	—
ID 8.e- aggregate base	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Clearing, grubbing, demolition
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.82753942812286, -121.31403555448554
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.3	9.49	82.4	93.3	0.20	3.56	12.5	16.1	3.28	1.42	4.70	—	22,000	22,000	0.88	0.20	2.11	22,082
Mit.	2.42	2.38	15.9	123	0.20	0.43	12.5	12.9	0.43	1.42	1.82	—	22,000	22,000	0.88	0.20	2.11	22,082
% Reduced	78%	75%	81%	-32%	—	88%	—	20%	87%	—	61%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.63	4.74	41.2	46.3	0.10	1.78	6.25	8.03	1.64	0.71	2.35	—	10,970	10,970	0.44	0.10	0.03	11,011
Mit.	1.18	1.16	7.40	61.3	0.10	0.20	6.25	6.45	0.20	0.71	0.91	—	10,970	10,970	0.44	0.10	0.03	11,011
% Reduced	79%	75%	82%	-32%	—	89%	—	20%	88%	—	61%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.05	0.88	7.67	8.64	0.02	0.33	1.16	1.50	0.31	0.13	0.44	—	2,045	2,045	0.08	0.02	0.09	2,053
Mit.	0.22	0.22	1.38	11.4	0.02	0.04	1.16	1.20	0.04	0.13	0.17	—	2,045	2,045	0.08	0.02	0.09	2,053
% Reduced	79%	75%	82%	-32%	—	89%	—	20%	88%	—	61%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.16	1.40	1.58	< 0.005	0.06	0.21	0.27	0.06	0.02	0.08	—	339	339	0.01	< 0.005	0.01	340
Mit.	0.04	0.04	0.25	2.08	< 0.005	0.01	0.21	0.22	0.01	0.02	0.03	—	339	339	0.01	< 0.005	0.01	340
% Reduced	79%	75%	82%	-32%	—	89%	—	20%	88%	—	61%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.3	9.49	82.4	93.3	0.20	3.56	12.5	16.1	3.28	1.42	4.70	—	22,000	22,000	0.88	0.20	2.11	22,082
2027	5.40	4.55	38.3	46.3	0.10	1.61	5.98	7.59	1.48	0.64	2.13	—	10,994	10,994	0.44	0.10	0.95	11,035
2028	5.18	4.37	35.8	45.9	0.10	1.46	5.98	7.45	1.35	0.64	1.99	—	10,986	10,986	0.44	0.10	0.85	11,027
2029	5.00	4.21	33.6	45.4	0.10	1.34	5.98	7.32	1.23	0.64	1.88	—	10,979	10,979	0.44	0.09	0.76	11,018
2030	9.68	8.15	63.8	90.1	0.20	2.53	12.0	14.5	2.33	1.29	3.62	—	21,949	21,949	0.88	0.18	1.34	22,025
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	5.63	4.74	41.2	46.3	0.10	1.78	6.25	8.03	1.64	0.71	2.35	—	10,970	10,970	0.44	0.10	0.03	11,011
2027	5.38	4.54	38.3	46.0	0.10	1.61	6.25	7.86	1.48	0.71	2.19	—	10,965	10,965	0.44	0.10	0.02	11,006
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.05	0.88	7.67	8.64	0.02	0.33	1.16	1.50	0.31	0.13	0.44	—	2,045	2,045	0.08	0.02	0.09	2,053
2027	0.87	0.73	6.19	7.44	0.02	0.26	0.98	1.24	0.24	0.11	0.35	—	1,774	1,774	0.07	0.02	0.07	1,780
2028	0.38	0.32	2.65	3.37	0.01	0.11	0.44	0.55	0.10	0.05	0.15	—	811	811	0.03	0.01	0.03	814

2029	0.29	0.24	1.93	2.60	0.01	0.08	0.34	0.42	0.07	0.04	0.11	—	630	630	0.03	0.01	0.02	633
2030	0.53	0.45	3.49	4.91	0.01	0.14	0.66	0.79	0.13	0.07	0.20	—	1,200	1,200	0.05	0.01	0.03	1,205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.19	0.16	1.40	1.58	< 0.005	0.06	0.21	0.27	0.06	0.02	0.08	—	339	339	0.01	< 0.005	0.01	340
2027	0.16	0.13	1.13	1.36	< 0.005	0.05	0.18	0.23	0.04	0.02	0.06	—	294	294	0.01	< 0.005	0.01	295
2028	0.07	0.06	0.48	0.62	< 0.005	0.02	0.08	0.10	0.02	0.01	0.03	—	134	134	0.01	< 0.005	< 0.005	135
2029	0.05	0.04	0.35	0.47	< 0.005	0.01	0.06	0.08	0.01	0.01	0.02	—	104	104	< 0.005	< 0.005	< 0.005	105
2030	0.10	0.08	0.64	0.90	< 0.005	0.03	0.12	0.14	0.02	0.01	0.04	—	199	199	0.01	< 0.005	0.01	199

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.37	2.34	14.7	123	0.20	0.40	12.5	12.9	0.40	1.42	1.82	—	22,000	22,000	0.88	0.20	2.11	22,082
2027	1.29	1.25	7.55	61.6	0.10	0.22	5.98	6.21	0.22	0.64	0.87	—	10,994	10,994	0.44	0.10	0.95	11,035
2028	1.16	1.16	7.36	61.4	0.10	0.20	5.98	6.18	0.20	0.64	0.85	—	10,986	10,986	0.44	0.10	0.85	11,027
2029	1.20	1.18	9.88	61.3	0.10	0.20	5.98	6.18	0.20	0.64	0.85	—	10,979	10,979	0.44	0.09	0.76	11,018
2030	2.42	2.38	15.9	122	0.20	0.43	12.0	12.4	0.43	1.29	1.71	—	21,949	21,949	0.88	0.18	1.34	22,025
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.18	1.16	7.40	61.3	0.10	0.20	6.25	6.45	0.20	0.71	0.91	—	10,970	10,970	0.44	0.10	0.03	11,011
2027	1.16	1.16	7.39	61.2	0.10	0.20	6.25	6.45	0.20	0.71	0.91	—	10,965	10,965	0.44	0.10	0.02	11,006
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.22	0.22	1.38	11.4	0.02	0.04	1.16	1.20	0.04	0.13	0.17	—	2,045	2,045	0.08	0.02	0.09	2,053
2027	0.20	0.20	1.21	9.90	0.02	0.03	0.98	1.01	0.03	0.11	0.14	—	1,774	1,774	0.07	0.02	0.07	1,780
2028	0.09	0.08	0.55	4.52	0.01	0.01	0.44	0.46	0.01	0.05	0.06	—	811	811	0.03	0.01	0.03	814
2029	0.07	0.07	0.50	3.51	0.01	0.01	0.34	0.36	0.01	0.04	0.05	—	630	630	0.03	0.01	0.02	633
2030	0.13	0.13	0.82	6.68	0.01	0.02	0.66	0.68	0.02	0.07	0.09	—	1,200	1,200	0.05	0.01	0.03	1,205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.04	0.04	0.25	2.08	< 0.005	0.01	0.21	0.22	0.01	0.02	0.03	—	339	339	0.01	< 0.005	0.01	340
2027	0.04	0.04	0.22	1.81	< 0.005	0.01	0.18	0.19	0.01	0.02	0.03	—	294	294	0.01	< 0.005	0.01	295
2028	0.02	0.02	0.10	0.83	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	134	134	0.01	< 0.005	< 0.005	135
2029	0.01	0.01	0.09	0.64	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	104	104	< 0.005	< 0.005	< 0.005	105
2030	0.02	0.02	0.15	1.22	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.02	—	199	199	0.01	< 0.005	0.01	199

3. Construction Emissions Details

3.1. ID 3- Clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.49	4.61	41.1	45.0	0.10	1.78	—	1.78	1.64	—	1.64	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—

Demoliti	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.48	2.71	0.01	0.11	—	0.11	0.10	—	0.10	—	644	644	0.03	0.01	—	647
Dust From Material Movement	—	—	—	—	—	—	0.36	0.36	—	0.04	0.04	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	107	107	< 0.005	< 0.005	—	107
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.14	0.12	0.11	1.30	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	0.01	0.01	0.03	282
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.03	17.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.85	2.85	< 0.005	< 0.005	< 0.005	2.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 3- Clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—

Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.44	3.62	0.01	0.01	—	0.01	0.01	—	0.01	—	644	644	0.03	0.01	—	647
Dust From Material Movement	—	—	—	—	—	—	0.36	0.36	—	0.04	0.04	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	107	107	< 0.005	< 0.005	—	107
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.11	1.30	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	0.01	0.01	0.03	282
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.03	17.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.85	2.85	< 0.005	< 0.005	< 0.005	2.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 1- clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.49	4.61	41.1	45.0	0.10	1.78	—	1.78	1.64	—	1.64	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.56	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 1- clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 7- clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.49	4.61	41.1	45.0	0.10	1.78	—	1.78	1.64	—	1.64	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	3.04	3.33	0.01	0.13	—	0.13	0.12	—	0.12	—	791	791	0.03	0.01	—	794

Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.55	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	131	131	0.01	< 0.005	—	131
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.1	21.1	< 0.005	< 0.005	0.03	21.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	0.01	3.55

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 7- clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.54	4.44	0.01	0.01	—	0.01	0.01	—	0.01	—	791	791	0.03	0.01	—	794
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	131	131	0.01	< 0.005	—	131
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.1	21.1	< 0.005	< 0.005	0.03	21.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	0.01	3.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 4- clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.49	4.61	41.1	45.0	0.10	1.78	—	1.78	1.64	—	1.64	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.56	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 4- clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 5- clearing and grubbing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	5.49	4.61	41.1	45.0	0.10	1.78	—	1.78	1.64	—	1.64	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.49	4.61	41.1	45.0	0.10	1.78	—	1.78	1.64	—	1.64	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.01	1.11	< 0.005	0.04	—	0.04	0.04	—	0.04	—	264	264	0.01	< 0.005	—	265
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.02	0.02	0.18	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.6	43.6	< 0.005	< 0.005	—	43.8
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.11	1.30	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	0.01	0.01	0.03	282
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.03	7.03	< 0.005	< 0.005	0.01	7.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 5- clearing and grubbing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,692	10,692	0.43	0.09	—	10,729
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.18	1.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	264	264	0.01	< 0.005	—	265

Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.6	43.6	< 0.005	< 0.005	—	43.8
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	1.64	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	308	308	0.01	0.01	1.06	312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.11	1.30	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	0.01	0.01	0.03	282
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.03	7.03	< 0.005	< 0.005	0.01	7.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 15- clearing and grubbing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.26	4.42	38.2	44.8	0.10	1.61	—	1.61	1.48	—	1.48	—	10,691	10,691	0.43	0.09	—	10,728
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	3.98	4.66	0.01	0.17	—	0.17	0.15	—	0.15	—	1,113	1,113	0.05	0.01	—	1,117

Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.73	0.85	< 0.005	0.03	—	0.03	0.03	—	0.03	—	184	184	0.01	< 0.005	—	185
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.08	1.52	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	303	303	0.01	0.01	0.95	307
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	29.2	29.2	< 0.005	< 0.005	0.04	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.84	4.84	< 0.005	< 0.005	0.01	4.91

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 15- clearing and grubbing (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	1.13	7.47	60.0	0.10	0.22	—	0.22	0.22	—	0.22	—	10,691	10,691	0.43	0.09	—	10,728
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	0.78	6.25	0.01	0.02	—	0.02	0.02	—	0.02	—	1,113	1,113	0.05	0.01	—	1,117
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	184	184	0.01	< 0.005	—	185
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.08	1.52	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	303	303	0.01	0.01	0.95	307
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	29.2	29.2	< 0.005	< 0.005	0.04	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.84	4.84	< 0.005	< 0.005	0.01	4.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. ID 12- clearing and grubbing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.26	4.42	38.2	44.8	0.10	1.61	—	1.61	1.48	—	1.48	—	10,691	10,691	0.43	0.09	—	10,728
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.68	1.96	< 0.005	0.07	—	0.07	0.07	—	0.07	—	469	469	0.02	< 0.005	—	470
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.03	0.03	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.31	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.6	77.6	< 0.005	< 0.005	—	77.9
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.10	1.20	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	274	274	0.01	0.01	0.02	278
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.07

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. ID 12- clearing and grubbing (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,691	10,691	0.43	0.09	—	10,728
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.32	2.63	< 0.005	0.01	—	0.01	0.01	—	0.01	—	469	469	0.02	< 0.005	—	470

Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.03	0.03	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.6	77.6	< 0.005	< 0.005	—	77.9
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.10	1.20	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	274	274	0.01	0.01	0.02	278
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. ID 2- clearing and grubbing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.26	4.42	38.2	44.8	0.10	1.61	—	1.61	1.48	—	1.48	—	10,691	10,691	0.43	0.09	—	10,728
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	146	146	0.01	< 0.005	—	147

Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.08	1.52	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	303	303	0.01	0.01	0.95	307
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.85	3.85	< 0.005	< 0.005	0.01	3.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. ID 2- clearing and grubbing (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,691	10,691	0.43	0.09	—	10,728
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.08	1.52	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	303	303	0.01	0.01	0.95	307
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.85	3.85	< 0.005	< 0.005	0.01	3.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. ID 8.a - clearing and grubbing (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.05	4.25	35.8	44.5	0.10	1.46	—	1.46	1.35	—	1.35	—	10,689	10,689	0.43	0.09	—	10,726
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.65	3.29	0.01	0.11	—	0.11	0.10	—	0.10	—	791	791	0.03	0.01	—	793
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.48	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	131	131	0.01	< 0.005	—	131

Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.07	1.42	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	297	297	0.01	0.01	0.85	301
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	20.4	20.4	< 0.005	< 0.005	0.03	20.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.37	3.37	< 0.005	< 0.005	< 0.005	3.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. ID 8.a - clearing and grubbing (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,689	10,689	0.43	0.09	—	10,726
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.54	4.44	0.01	0.01	—	0.01	0.01	—	0.01	—	791	791	0.03	0.01	—	793
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	131	131	0.01	< 0.005	—	131
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.07	1.42	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	297	297	0.01	0.01	0.85	301
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	20.4	20.4	< 0.005	< 0.005	0.03	20.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.37	3.37	< 0.005	< 0.005	< 0.005	3.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. ID 8.b - clearing and grubbing (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.89	4.11	33.6	44.1	0.10	1.34	—	1.34	1.23	—	1.23	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.06	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	292	292	< 0.005	< 0.005	0.76	293
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. ID 8.b - clearing and grubbing (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,688	10,688	0.43	0.09	—	10,724

Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.06	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	292	292	< 0.005	< 0.005	0.76	293

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. ID 6- clearing and grubbing (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.89	4.11	33.6	44.1	0.10	1.34	—	1.34	1.23	—	1.23	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.01	1.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	322	322	0.01	< 0.005	—	323
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.18	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.3	53.3	< 0.005	< 0.005	—	53.5
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.06	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	292	292	< 0.005	< 0.005	0.76	293
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.15	8.15	< 0.005	< 0.005	0.01	8.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.35	1.35	< 0.005	< 0.005	< 0.005	1.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. ID 6- clearing and grubbing (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	1.08	9.82	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.03	0.03	0.30	1.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	322	322	0.01	< 0.005	—	323
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	53.3	53.3	< 0.005	< 0.005	—	53.5
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.06	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	292	292	< 0.005	< 0.005	0.76	293
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.15	8.15	< 0.005	< 0.005	0.01	8.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.35	1.35	< 0.005	< 0.005	< 0.005	1.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. ID 8.c- clearing and grubbing (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.89	4.11	33.6	44.1	0.10	1.34	—	1.34	1.23	—	1.23	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.06	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	292	292	< 0.005	< 0.005	0.76	293
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. ID 8.c- clearing and grubbing (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.06	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	292	292	< 0.005	< 0.005	0.76	293
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. ID 8.d- clearing and grubbing (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.73	3.98	31.8	43.8	0.10	1.27	—	1.27	1.16	—	1.16	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.44	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	287	287	< 0.005	< 0.005	0.67	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. ID 8.d- clearing and grubbing (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17	1.14	8.49	59.8	0.10	0.23	—	0.23	0.22	—	0.22	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	146	146	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	287	287	< 0.005	< 0.005	0.67	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. ID 8.e- clearing and grubbing (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.73	3.98	31.8	43.8	0.10	1.27	—	1.27	1.16	—	1.16	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.18	3.00	0.01	0.09	—	0.09	0.08	—	0.08	—	732	732	0.03	0.01	—	735
Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.40	0.55	< 0.005	0.02	—	0.02	0.01	—	0.01	—	121	121	< 0.005	< 0.005	—	122
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	287	287	< 0.005	< 0.005	0.67	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	18.2	18.2	< 0.005	< 0.005	0.02	18.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.02	3.02	< 0.005	< 0.005	< 0.005	3.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. ID 8.e- clearing and grubbing (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,688	10,688	0.43	0.09	—	10,724

Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.50	4.11	0.01	0.01	—	0.01	0.01	—	0.01	—	732	732	0.03	0.01	—	735
Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	121	121	< 0.005	< 0.005	—	122
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	287	287	< 0.005	< 0.005	0.67	288

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	18.2	18.2	< 0.005	< 0.005	0.02	18.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.02	3.02	< 0.005	< 0.005	< 0.005	3.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. ID 11- clearing and grubbing (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.73	3.98	31.8	43.8	0.10	1.27	—	1.27	1.16	—	1.16	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.87	1.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	293	293	0.01	< 0.005	—	294
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.5	48.5	< 0.005	< 0.005	—	48.6
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	287	287	< 0.005	< 0.005	0.67	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.29	7.29	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.21	1.21	< 0.005	< 0.005	< 0.005	1.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. ID 11- clearing and grubbing (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	7.29	60.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,688	10,688	0.43	0.09	—	10,724
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.03	0.03	0.20	1.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	293	293	0.01	< 0.005	—	294
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.5	48.5	< 0.005	< 0.005	—	48.6
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	287	287	< 0.005	< 0.005	0.67	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.29	7.29	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.21	1.21	< 0.005	< 0.005	< 0.005	1.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 3- Clearing and grubbing	Site Preparation	1/2/2026	2/2/2026	5.00	22.0	—
ID 1- clearing and grubbing	Site Preparation	7/3/2026	7/9/2026	5.00	5.00	—
ID 7- clearing and grubbing	Site Preparation	7/3/2026	8/10/2026	5.00	27.0	—
ID 4- clearing and grubbing	Site Preparation	7/19/2026	7/24/2026	5.00	5.00	—

ID 5- clearing and grubbing	Site Preparation	9/19/2026	10/1/2026	5.00	9.00	—
ID 15- clearing and grubbing	Site Preparation	6/7/2027	7/28/2027	5.00	38.0	—
ID 12- clearing and grubbing	Site Preparation	1/12/2027	2/2/2027	5.00	16.0	—
ID 2- clearing and grubbing	Site Preparation	8/1/2027	8/6/2027	5.00	5.00	—
ID 8.a - clearing and grubbing	Site Preparation	7/1/2028	8/8/2028	5.00	27.0	—
ID 8.b - clearing and grubbing	Site Preparation	7/1/2029	7/6/2029	5.00	5.00	—
ID 6- clearing and grubbing	Site Preparation	8/3/2029	8/17/2029	5.00	11.0	—
ID 8.c- clearing and grubbing	Site Preparation	9/1/2029	9/7/2029	5.00	5.00	—
ID 8.d- clearing and grubbing	Site Preparation	7/1/2030	7/5/2030	5.00	5.00	—
ID 8.e- clearing and grubbing	Site Preparation	7/1/2030	8/2/2030	5.00	25.0	—
ID 11- clearing and grubbing	Site Preparation	9/2/2030	9/13/2030	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3- Clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 3- Clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 3- Clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41

ID 3- Clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 3- Clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 3- Clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 3- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 1- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 1- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 1- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 1- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 1- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 1- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 1- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 7- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 7- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 7- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 7- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 7- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 7- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48

ID 7- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 4- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 4- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 4- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 4- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 4- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 4- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 4- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 5- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 5- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 5- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 5- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 5- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 5- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 5- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 15- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 15- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38

ID 15- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 15- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 15- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 15- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 15- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 12- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 12- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 12- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 12- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 12- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 12- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 12- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 2- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 2- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 2- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 2- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 2- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40

ID 2- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 2- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 8.a - clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 8.a - clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.a - clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.a - clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 8.a - clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.a - clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 8.a - clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 8.b - clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 8.b - clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.b - clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.b - clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 8.b - clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.b - clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 8.b - clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 6- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43

ID 6- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 6- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 6- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 6- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 6- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 6- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 8.c- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 8.c- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.c- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.c- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 8.c- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.c- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 8.c- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 8.d- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 8.d- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.d- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.d- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34

ID 8.d- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.d- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 8.d- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 8.e- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 8.e- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.e- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 8.e- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 8.e- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.e- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 8.e- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37
ID 11- clearing and grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
ID 11- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 11- clearing and grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
ID 11- clearing and grubbing	Other General Industrial Equipment	Diesel	Average	2.00	10.0	35.0	0.34
ID 11- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 11- clearing and grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
ID 11- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	10.0	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3- Clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 3- Clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 3- Clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 3- Clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 3- Clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 3- Clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 3- Clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 1- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 1- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 1- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 1- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 1- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 1- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 1- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 7- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 7- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38

ID 7- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 7- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 7- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 7- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 7- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 4- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 4- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 4- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 4- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 4- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 4- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 4- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 5- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 5- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 5- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 5- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 5- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40

ID 5- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 5- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 15- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 15- clearing and grubbing	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 15- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 15- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 15- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 15- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 15- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 12- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 12- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 12- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 12- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 12- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 12- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 12- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 2- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43

ID 2- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 2- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 2- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 2- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 2- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 2- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 8.a - clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 8.a - clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.a - clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.a - clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 8.a - clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.a - clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 8.a - clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 8.b - clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 8.b - clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.b - clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.b - clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34

ID 8.b - clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.b - clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 8.b - clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 6- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 6- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 6- clearing and grubbing	Graders	Diesel	Tier 4 Interim	1.00	10.0	148	0.41
ID 6- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 6- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 6- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 6- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 8.c- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 8.c- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.c- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.c- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 8.c- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.c- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 8.c- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37

ID 8.d- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 8.d- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.d- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.d- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 8.d- clearing and grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.d- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 8.d- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 8.e- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 8.e- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.e- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
ID 8.e- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 8.e- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.e- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 8.e- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37
ID 11- clearing and grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
ID 11- clearing and grubbing	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 11- clearing and grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41

ID 11- clearing and grubbing	Other General Industrial Equipment	Diesel	Tier 4 Final	2.00	10.0	35.0	0.34
ID 11- clearing and grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 11- clearing and grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48
ID 11- clearing and grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	10.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3- Clearing and grubbing	—	—	—	—
ID 3- Clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 3- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 3- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 3- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 1- clearing and grubbing	—	—	—	—
ID 1- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 1- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 1- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 1- clearing and grubbing	Onsite truck	—	—	HHDT
ID 7- clearing and grubbing	—	—	—	—
ID 7- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 7- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 7- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 7- clearing and grubbing	Onsite truck	—	—	HHDT
ID 4- clearing and grubbing	—	—	—	—
ID 4- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2

ID 4- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 4- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 4- clearing and grubbing	Onsite truck	—	—	HHDT
ID 5- clearing and grubbing	—	—	—	—
ID 5- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 5- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 5- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 5- clearing and grubbing	Onsite truck	—	—	HHDT
ID 12- clearing and grubbing	—	—	—	—
ID 12- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 12- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 12- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 12- clearing and grubbing	Onsite truck	—	—	HHDT
ID 15- clearing and grubbing	—	—	—	—
ID 15- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 15- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 15- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 15- clearing and grubbing	Onsite truck	—	—	HHDT
ID 2- clearing and grubbing	—	—	—	—
ID 2- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 2- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 2- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 2- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.a - clearing and grubbing	—	—	—	—
ID 8.a - clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.a - clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.a - clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.a - clearing and grubbing	Onsite truck	—	—	HHDT

ID 8.b - clearing and grubbing	—	—	—	—
ID 8.b - clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.b - clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.b - clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.b - clearing and grubbing	Onsite truck	—	—	HHDT
ID 6- clearing and grubbing	—	—	—	—
ID 6- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 6- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 6- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 6- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.c- clearing and grubbing	—	—	—	—
ID 8.c- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.c- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.c- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.c- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.d- clearing and grubbing	—	—	—	—
ID 8.d- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.d- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.d- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.d- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.e- clearing and grubbing	—	—	—	—
ID 8.e- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.e- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.e- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.e- clearing and grubbing	Onsite truck	—	—	HHDT
ID 11- clearing and grubbing	—	—	—	—
ID 11- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 11- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT

ID 11- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 11- clearing and grubbing	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3- Clearing and grubbing	—	—	—	—
ID 3- Clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 3- Clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 3- Clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 3- Clearing and grubbing	Onsite truck	—	—	HHDT
ID 1- clearing and grubbing	—	—	—	—
ID 1- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 1- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 1- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 1- clearing and grubbing	Onsite truck	—	—	HHDT
ID 7- clearing and grubbing	—	—	—	—
ID 7- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 7- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 7- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 7- clearing and grubbing	Onsite truck	—	—	HHDT
ID 4- clearing and grubbing	—	—	—	—
ID 4- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 4- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 4- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 4- clearing and grubbing	Onsite truck	—	—	HHDT
ID 5- clearing and grubbing	—	—	—	—
ID 5- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 5- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT

ID 5- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 5- clearing and grubbing	Onsite truck	—	—	HHDT
ID 12- clearing and grubbing	—	—	—	—
ID 12- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 12- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 12- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 12- clearing and grubbing	Onsite truck	—	—	HHDT
ID 15- clearing and grubbing	—	—	—	—
ID 15- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 15- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 15- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 15- clearing and grubbing	Onsite truck	—	—	HHDT
ID 2- clearing and grubbing	—	—	—	—
ID 2- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 2- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 2- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 2- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.a - clearing and grubbing	—	—	—	—
ID 8.a - clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.a - clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.a - clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.a - clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.b - clearing and grubbing	—	—	—	—
ID 8.b - clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.b - clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.b - clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.b - clearing and grubbing	Onsite truck	—	—	HHDT
ID 6- clearing and grubbing	—	—	—	—

ID 6- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 6- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 6- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 6- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.c- clearing and grubbing	—	—	—	—
ID 8.c- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.c- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.c- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.c- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.d- clearing and grubbing	—	—	—	—
ID 8.d- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.d- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.d- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.d- clearing and grubbing	Onsite truck	—	—	HHDT
ID 8.e- clearing and grubbing	—	—	—	—
ID 8.e- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 8.e- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 8.e- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 8.e- clearing and grubbing	Onsite truck	—	—	HHDT
ID 11- clearing and grubbing	—	—	—	—
ID 11- clearing and grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
ID 11- clearing and grubbing	Vendor	—	9.10	HHDT,MHDT
ID 11- clearing and grubbing	Hauling	0.00	20.0	HHDT
ID 11- clearing and grubbing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
ID 12- clearing and grubbing	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 3- Clearing and grubbing	—	—	124	—	—
ID 1- clearing and grubbing	—	—	28.1	0.00	—
ID 7- clearing and grubbing	—	—	152	0.00	—
ID 4- clearing and grubbing	—	—	28.1	0.00	—
ID 5- clearing and grubbing	—	—	50.6	0.00	—
ID 15- clearing and grubbing	—	—	214	0.00	—
ID 12- clearing and grubbing	—	—	90.0	0.00	—
ID 2- clearing and grubbing	—	—	28.1	0.00	—
ID 8.a - clearing and grubbing	—	—	152	0.00	—
ID 8.b - clearing and grubbing	—	—	28.1	0.00	—
ID 6- clearing and grubbing	—	—	61.9	0.00	—
ID 8.c- clearing and grubbing	—	—	28.1	0.00	—
ID 8.d- clearing and grubbing	—	—	28.1	0.00	—
ID 8.e- clearing and grubbing	—	—	141	0.00	—
ID 11- clearing and grubbing	—	—	56.3	0.00	—

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Floodwall
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.04	6.76	48.9	65.2	0.16	1.84	3.79	5.64	1.69	1.47	3.17	—	17,641	17,641	0.71	0.14	0.53	17,702
Mit.	1.98	1.93	12.8	95.4	0.16	0.38	3.79	4.18	0.38	1.47	1.85	—	17,641	17,641	0.71	0.14	0.53	17,702
% Reduced	75%	71%	74%	-46%	—	79%	—	26%	78%	—	42%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	0.39	2.81	3.74	0.01	0.11	0.22	0.32	0.10	0.08	0.18	—	1,014	1,014	0.04	0.01	0.01	1,018
Mit.	0.11	0.11	0.74	5.48	0.01	0.02	0.22	0.24	0.02	0.08	0.11	—	1,014	1,014	0.04	0.01	0.01	1,018
% Reduced	75%	71%	74%	-46%	—	79%	—	26%	78%	—	42%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.07	0.51	0.68	< 0.005	0.02	0.04	0.06	0.02	0.02	0.03	—	168	168	0.01	< 0.005	< 0.005	168
Mit.	0.02	0.02	0.13	1.00	< 0.005	< 0.005	0.04	0.04	< 0.005	0.02	0.02	—	168	168	0.01	< 0.005	< 0.005	168
% Reduced	75%	71%	74%	-46%	—	79%	—	26%	78%	—	42%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	8.04	6.76	48.9	65.2	0.16	1.84	3.79	5.64	1.69	1.47	3.17	—	17,641	17,641	0.71	0.14	0.53	17,702
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.46	0.39	2.81	3.74	0.01	0.11	0.22	0.32	0.10	0.08	0.18	—	1,014	1,014	0.04	0.01	0.01	1,018
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.08	0.07	0.51	0.68	< 0.005	0.02	0.04	0.06	0.02	0.02	0.03	—	168	168	0.01	< 0.005	< 0.005	168

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.98	1.93	12.8	95.4	0.16	0.38	3.79	4.18	0.38	1.47	1.85	—	17,641	17,641	0.71	0.14	0.53	17,702
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.11	0.11	0.74	5.48	0.01	0.02	0.22	0.24	0.02	0.08	0.11	—	1,014	1,014	0.04	0.01	0.01	1,018
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.02	0.02	0.13	1.00	< 0.005	< 0.005	0.04	0.04	< 0.005	0.02	0.02	—	168	168	0.01	< 0.005	< 0.005	168

3. Construction Emissions Details

3.1. ID 8c- Floodwall (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.96	6.68	48.9	64.3	0.16	1.84	—	1.84	1.69	—	1.69	—	17,435	17,435	0.71	0.14	—	17,495
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.27	2.01	2.64	0.01	0.08	—	0.08	0.07	—	0.07	—	717	717	0.03	0.01	—	719
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.05	0.37	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	119	119	< 0.005	< 0.005	—	119
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	< 0.005	0.53	207
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.84	7.84	< 0.005	< 0.005	0.01	7.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 8c- Floodwall (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.86	12.8	94.5	0.16	0.38	—	0.38	0.38	—	0.38	—	17,435	17,435	0.71	0.14	—	17,495
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.53	3.88	0.01	0.02	—	0.02	0.02	—	0.02	—	717	717	0.03	0.01	—	719
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.71	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	119	119	< 0.005	< 0.005	—	119
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	< 0.005	0.53	207
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.84	7.84	< 0.005	< 0.005	0.01	7.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 8b- Floodwall (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	7.96	6.68	48.9	64.3	0.16	1.84	—	1.84	1.69	—	1.69	—	17,435	17,435	0.71	0.14	—	17,495
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.80	1.06	< 0.005	0.03	—	0.03	0.03	—	0.03	—	287	287	0.01	< 0.005	—	288
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.5	47.5	< 0.005	< 0.005	—	47.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	< 0.005	0.53	207
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.14	3.14	< 0.005	< 0.005	< 0.005	3.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 8b- Floodwall (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.86	12.8	94.5	0.16	0.38	—	0.38	0.38	—	0.38	—	17,435	17,435	0.71	0.14	—	17,495

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.21	1.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	< 0.005	0.53	207

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.14	3.14	< 0.005	< 0.005	< 0.005	3.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 8c- Floodwall	Grading	7/16/2029	8/5/2029	5.00	15.0	—
ID 8b- Floodwall	Grading	9/11/2029	9/18/2029	5.00	6.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 8c- Floodwall	Bore/Drill Rigs	Diesel	Average	1.00	10.0	83.0	0.50
ID 8c- Floodwall	Cement and Mortar Mixers	Diesel	Average	1.00	10.0	10.0	0.56
ID 8c- Floodwall	Cranes	Diesel	Average	1.00	10.0	367	0.29
ID 8c- Floodwall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8c- Floodwall	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
ID 8c- Floodwall	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
ID 8c- Floodwall	Graders	Diesel	Average	1.00	8.00	148	0.41
ID 8c- Floodwall	Off-Highway Trucks	Diesel	Average	4.00	10.0	376	0.38
ID 8c- Floodwall	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
ID 8c- Floodwall	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
ID 8c- Floodwall	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 8c- Floodwall	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
ID 8c- Floodwall	Scrapers	Diesel	Average	2.00	8.00	423	0.48
ID 8c- Floodwall	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
ID 8c- Floodwall	Welders	Diesel	Average	1.00	8.00	46.0	0.45

ID 8b- Floodwall	Bore/Drill Rigs	Diesel	Average	1.00	10.0	83.0	0.50
ID 8b- Floodwall	Cement and Mortar Mixers	Diesel	Average	1.00	10.0	10.0	0.56
ID 8b- Floodwall	Cranes	Diesel	Average	1.00	10.0	367	0.29
ID 8b- Floodwall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8b- Floodwall	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
ID 8b- Floodwall	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
ID 8b- Floodwall	Graders	Diesel	Average	1.00	8.00	148	0.41
ID 8b- Floodwall	Off-Highway Trucks	Diesel	Average	4.00	10.0	376	0.38
ID 8b- Floodwall	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
ID 8b- Floodwall	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
ID 8b- Floodwall	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
ID 8b- Floodwall	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
ID 8b- Floodwall	Scrapers	Diesel	Average	2.00	8.00	423	0.48
ID 8b- Floodwall	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
ID 8b- Floodwall	Welders	Diesel	Average	1.00	8.00	46.0	0.45

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 8c- Floodwall	Bore/Drill Rigs	Diesel	Tier 4 Final	1.00	10.0	83.0	0.50
ID 8c- Floodwall	Cement and Mortar Mixers	Diesel	Average	1.00	10.0	10.0	0.56
ID 8c- Floodwall	Cranes	Diesel	Tier 4 Final	1.00	10.0	367	0.29
ID 8c- Floodwall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8c- Floodwall	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
ID 8c- Floodwall	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
ID 8c- Floodwall	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
ID 8c- Floodwall	Off-Highway Trucks	Diesel	Tier 4 Final	4.00	10.0	376	0.38

ID 8c- Floodwall	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
ID 8c- Floodwall	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
ID 8c- Floodwall	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 8c- Floodwall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
ID 8c- Floodwall	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
ID 8c- Floodwall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
ID 8c- Floodwall	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
ID 8b- Floodwall	Bore/Drill Rigs	Diesel	Tier 4 Final	1.00	10.0	83.0	0.50
ID 8b- Floodwall	Cement and Mortar Mixers	Diesel	Average	1.00	10.0	10.0	0.56
ID 8b- Floodwall	Cranes	Diesel	Tier 4 Final	1.00	10.0	367	0.29
ID 8b- Floodwall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8b- Floodwall	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
ID 8b- Floodwall	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
ID 8b- Floodwall	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
ID 8b- Floodwall	Off-Highway Trucks	Diesel	Tier 4 Final	4.00	10.0	376	0.38
ID 8b- Floodwall	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
ID 8b- Floodwall	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
ID 8b- Floodwall	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
ID 8b- Floodwall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
ID 8b- Floodwall	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
ID 8b- Floodwall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
ID 8b- Floodwall	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 8b- Floodwall	—	—	—	—
ID 8b- Floodwall	Worker	24.0	11.9	LDA,LDT1,LDT2
ID 8b- Floodwall	Vendor	—	9.10	HHDT,MHDT
ID 8b- Floodwall	Hauling	0.00	20.0	HHDT
ID 8b- Floodwall	Onsite truck	—	—	HHDT
ID 8c- Floodwall	—	—	—	—
ID 8c- Floodwall	Worker	24.0	11.9	LDA,LDT1,LDT2
ID 8c- Floodwall	Vendor	—	9.10	HHDT,MHDT
ID 8c- Floodwall	Hauling	0.00	20.0	HHDT
ID 8c- Floodwall	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 8b- Floodwall	—	—	—	—
ID 8b- Floodwall	Worker	24.0	11.9	LDA,LDT1,LDT2
ID 8b- Floodwall	Vendor	—	9.10	HHDT,MHDT
ID 8b- Floodwall	Hauling	0.00	20.0	HHDT
ID 8b- Floodwall	Onsite truck	—	—	HHDT
ID 8c- Floodwall	—	—	—	—
ID 8c- Floodwall	Worker	24.0	11.9	LDA,LDT1,LDT2
ID 8c- Floodwall	Vendor	—	9.10	HHDT,MHDT
ID 8c- Floodwall	Hauling	0.00	20.0	HHDT
ID 8c- Floodwall	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 8c- Floodwall	380	—	45.0	0.00	—
ID 8b- Floodwall	580	—	18.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Haul and Vendor trips
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.80	0.77	50.7	12.3	0.30	0.85	11.9	12.7	0.85	3.25	4.10	—	42,911	42,911	0.71	6.66	94.5	45,008
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	0.69	52.3	12.1	0.29	0.82	11.5	12.3	0.82	3.14	3.96	—	41,542	41,542	0.67	6.45	2.37	43,482
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	0.37	25.8	6.05	0.14	0.41	5.77	6.18	0.41	1.58	1.99	—	20,954	20,954	0.34	3.25	19.9	21,952
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.07	4.71	1.10	0.03	0.08	1.05	1.13	0.08	0.29	0.36	—	3,469	3,469	0.06	0.54	3.30	3,634

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.42	0.61	40.9	9.87	0.23	0.66	9.31	9.97	0.66	2.55	3.21	—	34,444	34,444	0.55	5.44	80.4	36,161

2027	1.80	0.77	50.7	12.3	0.30	0.85	11.9	12.7	0.85	3.25	4.10	—	42,911	42,911	0.71	6.66	94.5	45,008
2028	1.31	0.56	35.9	8.78	0.22	0.62	8.68	9.30	0.62	2.38	2.99	—	30,567	30,567	0.51	4.87	63.4	32,094
2029	0.57	0.29	18.1	4.55	0.11	0.32	4.49	4.81	0.32	1.23	1.55	—	15,401	15,401	0.26	2.41	29.9	16,157
2030	0.75	0.38	23.2	5.82	0.15	0.42	5.89	6.31	0.42	1.61	2.03	—	19,665	19,665	0.34	3.16	35.7	20,650
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.36	0.55	43.4	10.0	0.23	0.66	9.27	9.93	0.66	2.54	3.20	—	34,328	34,328	0.55	5.43	2.07	35,963
2027	1.67	0.69	52.3	12.1	0.29	0.82	11.5	12.3	0.82	3.14	3.96	—	41,542	41,542	0.67	6.45	2.37	43,482
2028	1.26	0.52	38.4	8.95	0.22	0.62	8.68	9.30	0.62	2.38	2.99	—	30,587	30,587	0.51	4.87	1.64	32,052
2029	0.39	0.19	13.8	3.30	0.08	0.23	3.20	3.43	0.23	0.88	1.11	—	10,995	10,995	0.19	1.72	0.55	11,514
2030	0.39	0.19	13.5	3.23	0.08	0.23	3.20	3.43	0.23	0.88	1.11	—	10,700	10,700	0.19	1.72	0.50	11,218
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.51	0.21	15.6	3.63	0.08	0.24	3.38	3.62	0.24	0.93	1.17	—	12,560	12,560	0.20	1.98	12.6	13,169
2027	0.86	0.37	25.8	6.05	0.14	0.41	5.77	6.18	0.41	1.58	1.99	—	20,954	20,954	0.34	3.25	19.9	21,952
2028	0.64	0.27	18.7	4.40	0.11	0.31	4.29	4.60	0.31	1.18	1.48	—	15,191	15,191	0.25	2.42	13.6	15,932
2029	0.19	0.10	6.50	1.58	0.04	0.11	1.54	1.65	0.11	0.42	0.53	—	5,312	5,312	0.09	0.83	4.46	5,566
2030	0.16	0.08	5.41	1.32	0.03	0.09	1.31	1.41	0.09	0.36	0.45	—	4,407	4,407	0.08	0.71	3.46	4,624
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.09	0.04	2.84	0.66	0.02	0.04	0.62	0.66	0.04	0.17	0.21	—	2,079	2,079	0.03	0.33	2.08	2,180
2027	0.16	0.07	4.71	1.10	0.03	0.08	1.05	1.13	0.08	0.29	0.36	—	3,469	3,469	0.06	0.54	3.30	3,634
2028	0.12	0.05	3.41	0.80	0.02	0.06	0.78	0.84	0.06	0.21	0.27	—	2,515	2,515	0.04	0.40	2.25	2,638
2029	0.04	0.02	1.19	0.29	0.01	0.02	0.28	0.30	0.02	0.08	0.10	—	879	879	0.01	0.14	0.74	922
2030	0.03	0.01	0.99	0.24	0.01	0.02	0.24	0.26	0.02	0.07	0.08	—	730	730	0.01	0.12	0.57	766

3. Construction Emissions Details

3.1. ID 3- trips (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	55.6	55.6	< 0.005	0.01	0.14	58.3
Hauling	0.43	0.19	12.5	3.02	0.07	0.20	2.86	3.06	0.20	0.78	0.99	—	10,566	10,566	0.17	1.67	24.7	11,093
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	55.6	55.6	< 0.005	0.01	< 0.005	58.2
Hauling	0.42	0.17	13.4	3.08	0.07	0.20	2.86	3.06	0.20	0.78	0.99	—	10,573	10,573	0.17	1.67	0.64	11,076

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.4	18.4	< 0.005	< 0.005	0.02	19.3
Hauling	0.14	0.06	4.34	1.01	0.02	0.07	0.94	1.01	0.07	0.26	0.33	—	3,504	3,504	0.06	0.55	3.51	3,674
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.05	3.05	< 0.005	< 0.005	< 0.005	3.19
Hauling	0.03	0.01	0.79	0.18	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	580	580	0.01	0.09	0.58	608

3.3. ID 1-trips (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.07	29.1
Hauling	0.45	0.20	13.1	3.16	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,046	11,046	0.18	1.75	25.8	11,597
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	< 0.005	29.1
Hauling	0.44	0.18	14.0	3.22	0.07	0.21	2.98	3.20	0.21	0.82	1.03	—	11,053	11,053	0.18	1.75	0.67	11,580
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	0.01	5.26
Hauling	0.08	0.03	2.47	0.58	0.01	0.04	0.54	0.58	0.04	0.15	0.19	—	1,998	1,998	0.03	0.32	2.00	2,095
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0.01	0.01	0.45	0.11	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	331	331	0.01	0.05	0.33	347

3.5. ID 7- trips (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.4	83.4	< 0.005	0.01	0.20	87.4
Hauling	0.48	0.21	13.9	3.36	0.08	0.23	3.17	3.40	0.23	0.87	1.09	—	11,732	11,732	0.19	1.85	27.4	12,317
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.5	83.5	< 0.005	0.01	0.01	87.3
Hauling	0.46	0.19	14.8	3.42	0.08	0.23	3.17	3.40	0.23	0.87	1.09	—	11,740	11,740	0.19	1.86	0.71	12,299
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.7	29.7	< 0.005	< 0.005	0.03	31.1
Hauling	0.17	0.07	5.17	1.20	0.03	0.08	1.12	1.20	0.08	0.31	0.39	—	4,180	4,180	0.07	0.66	4.19	4,382
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.92	4.92	< 0.005	< 0.005	0.01	5.15
Hauling	0.03	0.01	0.94	0.22	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	692	692	0.01	0.11	0.69	726

3.7. ID 7- trips (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.7	81.7	< 0.005	0.01	0.18	85.6
Hauling	0.48	0.20	13.5	3.28	0.08	0.23	3.17	3.40	0.23	0.87	1.09	—	11,461	11,461	0.19	1.78	25.2	12,021

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.7	81.7	< 0.005	0.01	< 0.005	85.5
Hauling	0.46	0.19	14.5	3.34	0.08	0.23	3.17	3.40	0.23	0.87	1.09	—	11,468	11,468	0.18	1.78	0.65	12,004
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.0	27.0	< 0.005	< 0.005	0.03	28.3
Hauling	0.16	0.07	4.67	1.09	0.03	0.07	1.04	1.12	0.07	0.29	0.36	—	3,791	3,791	0.06	0.59	3.60	3,972
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	< 0.005	4.68
Hauling	0.03	0.01	0.85	0.20	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	628	628	0.01	0.10	0.60	658

3.9. ID 4- trips (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.07	29.1
Hauling	0.47	0.20	13.7	3.30	0.08	0.22	3.11	3.34	0.22	0.85	1.07	—	11,527	11,527	0.19	1.82	26.9	12,101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	1.99
Hauling	0.03	0.01	0.98	0.23	0.01	0.02	0.21	0.23	0.02	0.06	0.07	—	790	790	0.01	0.12	0.79	828
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33
Hauling	0.01	< 0.005	0.18	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	< 0.005	0.02	0.13	137

3.11. ID 5- trips (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.07	29.1
Hauling	0.47	0.20	13.5	3.26	0.08	0.22	3.08	3.30	0.22	0.84	1.06	—	11,389	11,389	0.18	1.80	26.6	11,957
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	< 0.005	29.1
Hauling	0.45	0.18	14.4	3.32	0.08	0.22	3.08	3.30	0.22	0.84	1.06	—	11,396	11,396	0.18	1.80	0.69	11,939
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.95	4.95	< 0.005	< 0.005	0.01	5.18
Hauling	0.08	0.03	2.51	0.58	0.01	0.04	0.55	0.58	0.04	0.15	0.19	—	2,029	2,029	0.03	0.32	2.03	2,127
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.86
Hauling	0.01	0.01	0.46	0.11	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	336	336	0.01	0.05	0.34	352

3.13. ID 12- trips (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.4	54.4	< 0.005	0.01	0.12	57.1
Hauling	0.56	0.24	15.8	3.82	0.09	0.26	3.69	3.95	0.26	1.01	1.27	—	13,337	13,337	0.22	2.07	29.4	13,989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.5	54.5	< 0.005	0.01	< 0.005	57.0
Hauling	0.54	0.22	16.8	3.89	0.09	0.26	3.69	3.95	0.26	1.01	1.27	—	13,346	13,346	0.21	2.07	0.76	13,969
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.7	12.7	< 0.005	< 0.005	0.01	13.3
Hauling	0.13	0.05	3.83	0.90	0.02	0.06	0.86	0.92	0.06	0.23	0.30	—	3,107	3,107	0.05	0.48	2.95	3,255
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.10	2.10	< 0.005	< 0.005	< 0.005	2.20
Hauling	0.02	0.01	0.70	0.16	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	514	514	0.01	0.08	0.49	539

3.15. ID 15- trips (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.30	143
Hauling	1.30	0.55	36.9	8.94	0.22	0.62	8.64	9.26	0.62	2.37	2.98	—	31,232	31,232	0.51	4.85	68.8	32,759
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.01	143
Hauling	1.25	0.51	39.4	9.10	0.22	0.62	8.64	9.26	0.62	2.37	2.98	—	31,252	31,252	0.50	4.85	1.78	32,712

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	53.8	53.8	< 0.005	0.01	0.05	56.4
Hauling	0.51	0.22	15.2	3.56	0.09	0.24	3.40	3.64	0.24	0.93	1.17	—	12,350	12,350	0.20	1.92	11.7	12,938
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.91	8.91	< 0.005	< 0.005	0.01	9.33
Hauling	0.09	0.04	2.78	0.65	0.02	0.04	0.62	0.67	0.04	0.17	0.21	—	2,045	2,045	0.03	0.32	1.94	2,142

3.17. ID 15- trips (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	< 0.005	0.02	0.26	139
Hauling	1.30	0.55	35.8	8.73	0.22	0.62	8.64	9.26	0.62	2.37	2.98	—	30,434	30,434	0.50	4.85	63.2	31,955
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	< 0.005	0.02	0.01	139
Hauling	1.25	0.51	38.3	8.90	0.22	0.62	8.64	9.26	0.62	2.37	2.98	—	30,454	30,454	0.50	4.85	1.64	31,913
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.5	45.5	< 0.005	0.01	0.04	47.6
Hauling	0.44	0.18	12.8	3.01	0.07	0.21	2.95	3.16	0.21	0.81	1.02	—	10,425	10,425	0.17	1.66	9.33	10,934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.53	7.53	< 0.005	< 0.005	0.01	7.88
Hauling	0.08	0.03	2.34	0.55	0.01	0.04	0.54	0.58	0.04	0.15	0.19	—	1,726	1,726	0.03	0.27	1.54	1,810

3.19. ID 2-trips (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.2	27.2	< 0.005	< 0.005	0.06	28.5
Hauling	0.42	0.18	12.0	2.90	0.07	0.20	2.80	3.00	0.20	0.77	0.97	—	10,120	10,120	0.17	1.57	22.3	10,615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.2	27.2	< 0.005	< 0.005	< 0.005	28.5
Hauling	0.41	0.17	12.8	2.95	0.07	0.20	2.80	3.00	0.20	0.77	0.97	—	10,127	10,127	0.16	1.57	0.58	10,600
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.33	4.33	< 0.005	< 0.005	< 0.005	4.53
Hauling	0.07	0.03	1.98	0.46	0.01	0.03	0.44	0.47	0.03	0.12	0.15	—	1,609	1,609	0.03	0.25	1.53	1,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.72	0.72	< 0.005	< 0.005	< 0.005	0.75
Hauling	0.01	0.01	0.36	0.08	< 0.005	0.01	0.08	0.09	0.01	0.02	0.03	—	266	266	< 0.005	0.04	0.25	279

3.21. ID 8.a - trips (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.7	79.7	< 0.005	0.01	0.16	83.4
Hauling	0.48	0.20	13.1	3.20	0.08	0.23	3.17	3.40	0.23	0.87	1.09	—	11,168	11,168	0.18	1.78	23.2	11,726

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.8	79.8	< 0.005	0.01	< 0.005	83.4
Hauling	0.46	0.19	14.0	3.26	0.08	0.23	3.17	3.40	0.23	0.87	1.09	—	11,175	11,175	0.18	1.78	0.60	11,711
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.7	28.7	< 0.005	< 0.005	0.02	30.0
Hauling	0.17	0.07	4.94	1.16	0.03	0.08	1.14	1.22	0.08	0.31	0.39	—	4,022	4,022	0.07	0.64	3.60	4,219
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.75	4.75	< 0.005	< 0.005	< 0.005	4.97
Hauling	0.03	0.01	0.90	0.21	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	666	666	0.01	0.11	0.60	698

3.23. ID 8.a - trips (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	77.6	77.6	< 0.005	0.01	< 0.005	81.2
Hauling	0.38	0.19	13.6	3.26	0.08	0.23	3.17	3.40	0.23	0.87	1.09	—	10,880	10,880	0.18	1.70	0.55	11,393
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.9	12.9	< 0.005	< 0.005	0.01	13.5
Hauling	0.07	0.03	2.22	0.54	0.01	0.04	0.53	0.56	0.04	0.14	0.18	—	1,809	1,809	0.03	0.28	1.52	1,896
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.24
Hauling	0.01	0.01	0.40	0.10	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	300	300	0.01	0.05	0.25	314

3.25. ID 8.b -trips (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.6	26.6	< 0.005	< 0.005	0.05	27.8
Hauling	0.26	0.11	7.14	1.74	0.04	0.12	1.72	1.85	0.12	0.47	0.60	—	6,074	6,074	0.10	0.97	12.6	6,377
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	< 0.005	3.05
Hauling	0.03	0.01	0.82	0.19	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	666	666	0.01	0.11	0.60	698
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Hauling	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	110	110	< 0.005	0.02	0.10	116

3.27. ID 6- trips (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	51.7	51.7	< 0.005	0.01	0.09	54.2
Hauling	0.41	0.20	12.9	3.22	0.08	0.23	3.19	3.42	0.23	0.87	1.10	—	10,936	10,936	0.19	1.71	21.3	11,473
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	51.8	51.8	< 0.005	0.01	< 0.005	54.1

Hauling	0.39	0.19	13.7	3.28	0.08	0.23	3.19	3.42	0.23	0.87	1.10	—	10,944	10,944	0.19	1.71	0.55	11,460
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.01	16.0
Hauling	0.12	0.06	3.96	0.96	0.02	0.07	0.94	1.01	0.07	0.26	0.32	—	3,233	3,233	0.05	0.51	2.71	3,388
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.53	2.53	< 0.005	< 0.005	< 0.005	2.65
Hauling	0.02	0.01	0.72	0.18	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	535	535	0.01	0.08	0.45	561

3.29. ID 6- trips (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	50.2	50.2	< 0.005	0.01	< 0.005	52.5
Hauling	0.39	0.19	13.4	3.21	0.08	0.23	3.19	3.42	0.23	0.87	1.10	—	10,650	10,650	0.19	1.71	0.50	11,166
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.68	6.68	< 0.005	< 0.005	< 0.005	6.99
Hauling	0.05	0.03	1.74	0.42	0.01	0.03	0.42	0.45	0.03	0.12	0.15	—	1,417	1,417	0.02	0.23	1.11	1,486
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.16
Hauling	0.01	< 0.005	0.32	0.08	< 0.005	0.01	0.08	0.08	0.01	0.02	0.03	—	235	235	< 0.005	0.04	0.18	246

3.31. ID 8.c- trips (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.9	25.9	< 0.005	< 0.005	0.05	27.1
Hauling	0.16	0.08	5.16	1.29	0.03	0.09	1.28	1.37	0.09	0.35	0.44	—	4,387	4,387	0.07	0.69	8.53	4,603
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.48
Hauling	0.01	< 0.005	0.29	0.07	< 0.005	0.01	0.07	0.07	0.01	0.02	0.02	—	240	240	< 0.005	0.04	0.20	252
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.8	39.8	< 0.005	0.01	0.03	41.7

3.33. ID 8.d- trips (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.1	25.1	< 0.005	< 0.005	0.04	26.3
Hauling	0.37	0.19	11.5	2.89	0.07	0.21	2.93	3.14	0.21	0.80	1.01	—	9,776	9,776	0.17	1.57	17.7	10,266
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	< 0.005	4.68
Hauling	0.06	0.03	2.14	0.52	0.01	0.04	0.52	0.56	0.04	0.14	0.18	—	1,741	1,741	0.03	0.28	1.37	1,827
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.77

Hauling	0.01	0.01	0.39	0.09	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	288	288	0.01	0.05	0.23	303

3.35. ID 8.e- trips (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.1	25.1	< 0.005	< 0.005	0.04	26.3
Hauling	0.38	0.19	11.6	2.91	0.07	0.21	2.95	3.16	0.21	0.81	1.02	—	9,838	9,838	0.17	1.58	17.8	10,331
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.34	2.34	< 0.005	< 0.005	< 0.005	2.45
Hauling	0.03	0.02	1.13	0.27	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	917	917	0.02	0.15	0.72	962
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.40
Hauling	0.01	< 0.005	0.21	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	152	152	< 0.005	0.02	0.12	159

3.37. ID 11- trips (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.1	25.1	< 0.005	< 0.005	0.04	26.3
Hauling	0.20	0.10	6.20	1.56	0.04	0.11	1.58	1.69	0.11	0.43	0.54	—	5,259	5,259	0.09	0.85	9.54	5,523
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.1	25.1	< 0.005	< 0.005	< 0.005	26.3
Hauling	0.19	0.09	6.62	1.59	0.04	0.11	1.58	1.69	0.11	0.43	0.54	—	5,263	5,263	0.09	0.85	0.25	5,518
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.51	1.51	< 0.005	< 0.005	< 0.005	1.58
Hauling	0.01	0.01	0.39	0.09	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	317	317	0.01	0.05	0.25	333
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	52.5	52.5	< 0.005	0.01	0.04	55.1

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 3- trips	Building Construction	1/2/2026	6/20/2026	5.00	121	—
ID 1-trips	Building Construction	7/3/2026	10/2/2026	5.00	66.0	—
ID 7- trips	Building Construction	7/3/2026	6/18/2027	5.00	251	—
ID 4- trips	Building Construction	7/19/2026	8/21/2026	5.00	25.0	—
ID 5- trips	Building Construction	9/19/2026	12/20/2026	5.00	65.0	—
ID 12- trips	Building Construction	1/18/2027	5/15/2027	5.00	85.0	—
ID 15- trips	Building Construction	6/13/2027	6/23/2028	5.00	270	—
ID 2-trips	Building Construction	8/1/2027	10/20/2027	5.00	58.0	—
ID 8.a - trips	Building Construction	7/1/2028	3/26/2029	5.00	191	—
ID 8.b -trips	Building Construction	7/1/2028	8/25/2028	5.00	40.0	—
ID 6- trips	Building Construction	8/3/2029	3/9/2030	5.00	156	—
ID 8.c- trips	Building Construction	9/2/2029	9/29/2029	5.00	20.0	—
ID 8.d- trips	Building Construction	7/1/2030	9/28/2030	5.00	65.0	—
ID 8.e- trips	Building Construction	7/1/2030	8/15/2030	5.00	34.0	—
ID 11- trips	Building Construction	9/7/2030	10/8/2030	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 7- trips	—	—	—	—
ID 7- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 7- trips	Vendor	3.00	9.10	HHDT,MHDT
ID 7- trips	Hauling	171	20.0	HHDT
ID 7- trips	Onsite truck	—	—	HHDT
ID 3- trips	—	—	—	—
ID 3- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 3- trips	Vendor	2.00	9.10	HHDT,MHDT
ID 3- trips	Hauling	154	20.0	HHDT
ID 3- trips	Onsite truck	—	—	HHDT
ID 1-trips	—	—	—	—
ID 1-trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 1-trips	Vendor	1.00	9.10	HHDT,MHDT
ID 1-trips	Hauling	161	20.0	HHDT
ID 1-trips	Onsite truck	—	—	HHDT
ID 4- trips	—	—	—	—
ID 4- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 4- trips	Vendor	1.00	9.10	HHDT,MHDT
ID 4- trips	Hauling	168	20.0	HHDT
ID 4- trips	Onsite truck	—	—	HHDT
ID 5- trips	—	—	—	—
ID 5- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 5- trips	Vendor	1.00	9.10	HHDT,MHDT
ID 5- trips	Hauling	166	20.0	HHDT
ID 5- trips	Onsite truck	—	—	HHDT
ID 12- trips	—	—	—	—

ID 12- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 12- trips	Vendor	2.00	9.10	HHDT,MHDT
ID 12- trips	Hauling	199	20.0	HHDT
ID 12- trips	Onsite truck	—	—	HHDT
ID 15- trips	—	—	—	—
ID 15- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 15- trips	Vendor	5.00	9.10	HHDT,MHDT
ID 15- trips	Hauling	466	20.0	HHDT
ID 15- trips	Onsite truck	0.00	—	HHDT
ID 2-trips	—	—	—	—
ID 2-trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 2-trips	Vendor	1.00	9.10	HHDT,MHDT
ID 2-trips	Hauling	151	20.0	HHDT
ID 2-trips	Onsite truck	—	—	HHDT
ID 8.a - trips	—	—	—	—
ID 8.a - trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 8.a - trips	Vendor	3.00	9.10	HHDT,MHDT
ID 8.a - trips	Hauling	171	20.0	HHDT
ID 8.a - trips	Onsite truck	—	—	HHDT
ID 8.b -trips	—	—	—	—
ID 8.b -trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 8.b -trips	Vendor	1.00	9.10	HHDT,MHDT
ID 8.b -trips	Hauling	93.0	20.0	HHDT
ID 8.b -trips	Onsite truck	—	—	HHDT
ID 6- trips	—	—	—	—
ID 6- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 6- trips	Vendor	2.00	9.10	HHDT,MHDT
ID 6- trips	Hauling	172	20.0	HHDT

ID 6- trips	Onsite truck	—	—	HHDT
ID 8.c- trips	—	—	—	—
ID 8.c- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 8.c- trips	Vendor	1.00	9.10	HHDT,MHDT
ID 8.c- trips	Hauling	69.0	20.0	HHDT
ID 8.c- trips	Onsite truck	—	—	HHDT
ID 8.d- trips	—	—	—	—
ID 8.d- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 8.d- trips	Vendor	1.00	9.10	HHDT,MHDT
ID 8.d- trips	Hauling	158	20.0	HHDT
ID 8.d- trips	Onsite truck	—	—	HHDT
ID 8.e- trips	—	—	—	—
ID 8.e- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 8.e- trips	Vendor	1.00	9.10	HHDT,MHDT
ID 8.e- trips	Hauling	159	20.0	HHDT
ID 8.e- trips	Onsite truck	—	—	HHDT
ID 11- trips	—	—	—	—
ID 11- trips	Worker	0.00	11.9	LDA,LDT1,LDT2
ID 11- trips	Vendor	1.00	9.10	HHDT,MHDT
ID 11- trips	Hauling	85.0	20.0	HHDT
ID 11- trips	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-ID 10
Construction Start Date	11/17/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.7	8.96	70.3	89.4	0.20	2.99	18.1	21.0	2.75	5.35	8.10	—	21,555	21,555	0.86	0.17	1.38	21,630
Mit.	2.71	2.60	14.4	116	0.20	0.52	18.1	18.6	0.51	5.35	5.86	—	21,555	21,555	0.86	0.17	1.38	21,630
% Reduced	75%	71%	80%	-30%	—	83%	—	12%	81%	—	28%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.77	4.01	30.1	43.8	0.09	1.21	0.91	2.13	1.11	0.13	1.24	—	9,686	9,686	0.39	0.09	0.02	9,722
Mit.	1.08	1.05	6.00	54.7	0.09	0.20	0.91	1.11	0.20	0.13	0.33	—	9,686	9,686	0.39	0.09	0.02	9,722
% Reduced	77%	74%	80%	-25%	—	84%	—	48%	82%	—	74%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.29	1.08	8.36	10.9	0.02	0.34	1.01	1.35	0.31	0.30	0.61	—	2,424	2,424	0.10	0.02	0.08	2,433
Mit.	0.35	0.33	2.07	13.3	0.02	0.07	1.01	1.08	0.07	0.30	0.37	—	2,424	2,424	0.10	0.02	0.08	2,433
% Reduced	72%	69%	75%	-22%	—	79%	—	20%	78%	—	40%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	0.20	1.53	1.99	< 0.005	0.06	0.18	0.25	0.06	0.05	0.11	—	401	401	0.02	< 0.005	0.01	403
Mit.	0.06	0.06	0.38	2.43	< 0.005	0.01	0.18	0.20	0.01	0.05	0.07	—	401	401	0.02	< 0.005	0.01	403
% Reduced	72%	69%	75%	-22%	—	79%	—	20%	78%	—	40%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	10.7	8.96	70.3	89.4	0.20	2.99	18.1	21.0	2.75	5.35	8.10	—	21,555	21,555	0.86	0.17	1.38	21,630
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	4.77	4.01	30.1	43.8	0.09	1.21	0.91	2.13	1.11	0.13	1.24	—	9,686	9,686	0.39	0.09	0.02	9,722
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.29	1.08	8.36	10.9	0.02	0.34	1.01	1.35	0.31	0.30	0.61	—	2,424	2,424	0.10	0.02	0.08	2,433
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.23	0.20	1.53	1.99	< 0.005	0.06	0.18	0.25	0.06	0.05	0.11	—	401	401	0.02	< 0.005	0.01	403

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	2.71	2.60	14.4	116	0.20	0.52	18.1	18.6	0.51	5.35	5.86	—	21,555	21,555	0.86	0.17	1.38	21,630

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.08	1.05	6.00	54.7	0.09	0.20	0.91	1.11	0.20	0.13	0.33	—	9,686	9,686	0.39	0.09	0.02	9,722
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.35	0.33	2.07	13.3	0.02	0.07	1.01	1.08	0.07	0.30	0.37	—	2,424	2,424	0.10	0.02	0.08	2,433
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.06	0.06	0.38	2.43	< 0.005	0.01	0.18	0.20	0.01	0.05	0.07	—	401	401	0.02	< 0.005	0.01	403

3. Construction Emissions Details

3.1. Clearing and Grubbing (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.66	3.92	31.4	43.1	0.10	1.35	—	1.35	1.25	—	1.25	—	10,639	10,639	0.43	0.09	—	10,676
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.15	0.13	1.03	1.42	< 0.005	0.04	—	0.04	0.04	—	0.04	—	350	350	0.01	< 0.005	—	351
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.9	57.9	< 0.005	< 0.005	—	58.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	< 0.005	< 0.005	0.67	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.74	8.74	< 0.005	< 0.005	0.01	8.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.45	1.45	< 0.005	< 0.005	< 0.005	1.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Clearing and Grubbing (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	1.01	5.23	59.7	0.10	0.20	—	0.20	0.20	—	0.20	—	10,639	10,639	0.43	0.09	—	10,676
Dust From Material Movement	—	—	—	—	—	—	5.97	5.97	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	1.96	< 0.005	0.01	—	0.01	0.01	—	0.01	—	350	350	0.01	< 0.005	—	351
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	57.9	57.9	< 0.005	< 0.005	—	58.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	1.24	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	< 0.005	< 0.005	0.67	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.74	8.74	< 0.005	< 0.005	0.01	8.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.45	1.45	< 0.005	< 0.005	< 0.005	1.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Restoration (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	7.38	13.5	0.03	0.28	—	0.28	0.26	—	0.26	—	3,175	3,175	0.13	0.03	—	3,185
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	7.38	13.5	0.03	0.28	—	0.28	0.26	—	0.26	—	3,175	3,175	0.13	0.03	—	3,185
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.17	2.14	< 0.005	0.04	—	0.04	0.04	—	0.04	—	504	504	0.02	< 0.005	—	506

Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.21	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.5	83.5	< 0.005	< 0.005	—	83.8
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.01	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.5	67.5	< 0.005	< 0.005	0.16	67.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.1	61.1	< 0.005	< 0.005	< 0.005	61.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Restoration (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	1.56	18.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,175	3,175	0.13	0.03	—	3,185
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.25	2.97	< 0.005	0.01	—	0.01	0.01	—	0.01	—	504	504	0.02	< 0.005	—	506
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	83.5	83.5	< 0.005	< 0.005	—	83.8
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.01	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.5	67.5	< 0.005	< 0.005	0.16	67.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.1	61.1	< 0.005	< 0.005	< 0.005	61.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Levee Degrade (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.70	3.11	24.2	29.1	0.07	1.05	—	1.05	0.96	—	0.96	—	7,599	7,599	0.31	0.06	—	7,625
Dust From Material Movement	—	—	—	—	—	—	11.5	11.5	—	4.57	4.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.33	1.60	< 0.005	0.06	—	0.06	0.05	—	0.05	—	416	416	0.02	< 0.005	—	418
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.24	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.9	68.9	< 0.005	< 0.005	—	69.2
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.32	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.86	6.86	< 0.005	< 0.005	0.01	6.95

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Levee Degrade (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	3.73	39.7	0.07	0.14	—	0.14	0.14	—	0.14	—	7,599	7,599	0.31	0.06	—	7,625
Dust From Material Movement	—	—	—	—	—	—	11.5	11.5	—	4.57	4.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.20	2.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	416	416	0.02	< 0.005	—	418

Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.9	68.9	< 0.005	< 0.005	—	69.2
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.32	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.86	6.86	< 0.005	< 0.005	0.01	6.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. SBslurry wall (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.06	1.72	14.6	14.7	0.03	0.59	—	0.59	0.54	—	0.54	—	2,727	2,727	0.11	0.02	—	2,736
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.33	2.80	2.81	0.01	0.11	—	0.11	0.10	—	0.10	—	523	523	0.02	< 0.005	—	525
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.51	0.51	< 0.005	0.02	—	0.02	0.02	—	0.02	—	86.6	86.6	< 0.005	< 0.005	—	86.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	< 0.005	< 0.005	0.39	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.0	30.0	< 0.005	< 0.005	0.03	30.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.97	4.97	< 0.005	< 0.005	0.01	5.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. SBslurry wall (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.67	5.32	14.6	0.03	0.18	—	0.18	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,736

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.02	2.79	0.01	0.03	—	0.03	0.03	—	0.03	—	523	523	0.02	< 0.005	—	525
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.6	86.6	< 0.005	< 0.005	—	86.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	< 0.005	< 0.005	0.39	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.0	30.0	< 0.005	< 0.005	0.03	30.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.97	4.97	< 0.005	< 0.005	0.01	5.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Levee Fill (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.34	2.80	22.7	29.4	0.06	0.93	—	0.93	0.85	—	0.85	—	6,283	6,283	0.25	0.05	—	6,304
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.34	2.80	22.7	29.4	0.06	0.93	—	0.93	0.85	—	0.85	—	6,283	6,283	0.25	0.05	—	6,304
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.24	1.93	2.50	< 0.005	0.08	—	0.08	0.07	—	0.07	—	534	534	0.02	< 0.005	—	535

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.3	88.3	< 0.005	< 0.005	—	88.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.63	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	168	168	< 0.005	0.01	0.01	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	0.02	14.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Levee Fill (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.67	4.37	35.2	0.06	0.14	—	0.14	0.14	—	0.14	—	6,283	6,283	0.25	0.05	—	6,304
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.37	2.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	534	534	0.02	< 0.005	—	535
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.3	88.3	< 0.005	< 0.005	—	88.6

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	< 0.005	< 0.005	0.43	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.63	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	168	168	< 0.005	0.01	0.01	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	0.02	14.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Pipe Rehabilitaion (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.56	6.54	0.01	0.08	—	0.08	0.08	—	0.08	—	974	974	0.04	0.01	—	977
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.7	18.7	< 0.005	< 0.005	—	18.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.09	3.09	< 0.005	< 0.005	—	3.10
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Pipe Rehabilitaion (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	< 0.005	< 0.005	0.02	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.7	18.7	< 0.005	< 0.005	—	18.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.09	3.09	< 0.005	< 0.005	—	3.10
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Rock Slope Protection (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.56	6.54	0.01	0.08	—	0.08	0.08	—	0.08	—	974	974	0.04	0.01	—	977
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.44	0.44	< 0.005	< 0.005	—	0.44
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Rock Slope Protection (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.44	0.44	< 0.005	< 0.005	—	0.44

Architectural Coating	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Aggregate Base (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.65	0.54	4.97	7.41	0.01	0.17	—	0.17	0.16	—	0.16	—	1,121	1,121	0.05	0.01	—	1,125
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.07	3.07	< 0.005	< 0.005	—	3.08
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.51	0.51	< 0.005	< 0.005	—	0.51
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Aggregate Base (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	2.04	7.86	0.01	0.02	—	0.02	0.02	—	0.02	—	1,121	1,121	0.05	0.01	—	1,125
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.07	3.07	< 0.005	< 0.005	—	3.08

Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.51	0.51	< 0.005	< 0.005	—	0.51
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.28	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Clearing and Grubbing	Site Preparation	7/1/2030	7/16/2030	5.00	12.0	—
Site Restoration	Site Preparation	7/17/2030	10/5/2030	5.00	58.0	—
Levee Degrade	Grading	7/8/2030	8/3/2030	5.00	20.0	—
SBslurry wall	Building Construction	5/25/2030	8/31/2030	5.00	70.0	—
Levee Fill	Building Construction	9/6/2030	10/19/2030	5.00	31.0	—
Pipe Rehabilitaion	Building Construction	9/6/2030	9/16/2030	5.00	7.00	—
Rock Slope Protection	Building Construction	9/6/2030	9/8/2030	5.00	1.00	—
Aggregate Base	Paving	9/20/2030	9/20/2030	5.00	1.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Clearing and Grubbing	Crawler Tractors	Diesel	Average	2.00	10.0	87.0	0.43
Clearing and Grubbing	Graders	Diesel	Average	1.00	10.0	148	0.41
Clearing and Grubbing	Other Construction Equipment	Diesel	Average	2.00	10.0	82.0	0.42
Clearing and Grubbing	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Clearing and Grubbing	Scrapers	Diesel	Average	3.00	10.0	423	0.48
Clearing and Grubbing	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
Site Restoration	Graders	Diesel	Average	1.00	10.0	148	0.41
Site Restoration	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
Site Restoration	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Site Restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Levee Degrade	Graders	Diesel	Average	1.00	10.0	148	0.41
Levee Degrade	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Levee Degrade	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
Levee Degrade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
SBslurry wall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
SBslurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
SBslurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
SBslurry wall	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
SBslurry wall	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Levee Fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
Levee Fill	Graders	Diesel	Average	1.00	10.0	148	0.41

Levee Fill	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
Levee Fill	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
Levee Fill	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
Levee Fill	Scrapers	Diesel	Average	1.00	10.0	423	0.48
Levee Fill	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Pipe Rehabilitaion	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
Pipe Rehabilitaion	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Pipe Rehabilitaion	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Rock Slope Protection	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
Rock Slope Protection	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
Rock Slope Protection	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
Aggregate Base	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
Aggregate Base	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
Aggregate Base	Rollers	Diesel	Average	2.00	10.0	36.0	0.38

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Clearing and Grubbing	Crawler Tractors	Diesel	Tier 4 Final	2.00	10.0	87.0	0.43
Clearing and Grubbing	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
Clearing and Grubbing	Other Construction Equipment	Diesel	Tier 4 Final	2.00	10.0	82.0	0.42
Clearing and Grubbing	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
Clearing and Grubbing	Scrapers	Diesel	Tier 4 Final	3.00	10.0	423	0.48

Clearing and Grubbing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
Site Restoration	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
Site Restoration	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
Site Restoration	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
Site Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Levee Degrade	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
Levee Degrade	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
Levee Degrade	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
Levee Degrade	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
SBslurry wall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
SBslurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
SBslurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
SBslurry wall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
SBslurry wall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Levee Fill	Dumpers/Tenders	Diesel	Average	1.00	10.0	16.0	0.38
Levee Fill	Graders	Diesel	Tier 4 Final	1.00	10.0	148	0.41
Levee Fill	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
Levee Fill	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
Levee Fill	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
Levee Fill	Scrapers	Diesel	Tier 4 Final	1.00	10.0	423	0.48
Levee Fill	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Pipe Rehabilitaion	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
Pipe Rehabilitaion	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40

Pipe Rehabilitaion	Tractors/Loaders/Back	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Rock Slope Protection	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
Rock Slope Protection	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
Rock Slope Protection	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
Aggregate Base	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
Aggregate Base	Paving Equipment	Diesel	Tier 4 Final	1.00	10.0	89.0	0.36
Aggregate Base	Rollers	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
SBslurry wall	—	—	—	—
SBslurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
SBslurry wall	Vendor	0.00	9.10	HHDT,MHDT
SBslurry wall	Hauling	0.00	20.0	HHDT
SBslurry wall	Onsite truck	—	—	HHDT
Clearing and Grubbing	—	—	—	—
Clearing and Grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
Clearing and Grubbing	Vendor	—	9.10	HHDT,MHDT
Clearing and Grubbing	Hauling	0.00	20.0	HHDT
Clearing and Grubbing	Onsite truck	—	—	HHDT
Levee Degrade	—	—	—	—
Levee Degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
Levee Degrade	Vendor	—	9.10	HHDT,MHDT
Levee Degrade	Hauling	0.00	20.0	HHDT
Levee Degrade	Onsite truck	—	—	HHDT

Levee Fill	—	—	—	—
Levee Fill	Worker	22.0	11.9	LDA,LDT1,LDT2
Levee Fill	Vendor	0.00	9.10	HHDT,MHDT
Levee Fill	Hauling	0.00	20.0	HHDT
Levee Fill	Onsite truck	—	—	HHDT
Pipe Rehabilitaion	—	—	—	—
Pipe Rehabilitaion	Worker	12.0	11.9	LDA,LDT1,LDT2
Pipe Rehabilitaion	Vendor	0.00	9.10	HHDT,MHDT
Pipe Rehabilitaion	Hauling	0.00	20.0	HHDT
Pipe Rehabilitaion	Onsite truck	—	—	HHDT
Rock Slope Protection	—	—	—	—
Rock Slope Protection	Worker	12.0	11.9	LDA,LDT1,LDT2
Rock Slope Protection	Vendor	0.00	9.10	HHDT,MHDT
Rock Slope Protection	Hauling	0.00	20.0	HHDT
Rock Slope Protection	Onsite truck	—	—	HHDT
Site Restoration	—	—	—	—
Site Restoration	Worker	8.00	11.9	LDA,LDT1,LDT2
Site Restoration	Vendor	—	9.10	HHDT,MHDT
Site Restoration	Hauling	0.00	20.0	HHDT
Site Restoration	Onsite truck	—	—	HHDT
Aggregate Base	—	—	—	—
Aggregate Base	Worker	14.0	11.9	LDA,LDT1,LDT2
Aggregate Base	Vendor	—	9.10	HHDT,MHDT
Aggregate Base	Hauling	0.00	20.0	HHDT
Aggregate Base	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

SBslurry wall	—	—	—	—
SBslurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
SBslurry wall	Vendor	0.00	9.10	HHDT,MHDT
SBslurry wall	Hauling	0.00	20.0	HHDT
SBslurry wall	Onsite truck	—	—	HHDT
Clearing and Grubbing	—	—	—	—
Clearing and Grubbing	Worker	34.0	11.9	LDA,LDT1,LDT2
Clearing and Grubbing	Vendor	—	9.10	HHDT,MHDT
Clearing and Grubbing	Hauling	0.00	20.0	HHDT
Clearing and Grubbing	Onsite truck	—	—	HHDT
Levee Degrade	—	—	—	—
Levee Degrade	Worker	16.0	11.9	LDA,LDT1,LDT2
Levee Degrade	Vendor	—	9.10	HHDT,MHDT
Levee Degrade	Hauling	0.00	20.0	HHDT
Levee Degrade	Onsite truck	—	—	HHDT
Levee Fill	—	—	—	—
Levee Fill	Worker	22.0	11.9	LDA,LDT1,LDT2
Levee Fill	Vendor	0.00	9.10	HHDT,MHDT
Levee Fill	Hauling	0.00	20.0	HHDT
Levee Fill	Onsite truck	—	—	HHDT
Pipe Rehabilitaion	—	—	—	—
Pipe Rehabilitaion	Worker	12.0	11.9	LDA,LDT1,LDT2
Pipe Rehabilitaion	Vendor	0.00	9.10	HHDT,MHDT
Pipe Rehabilitaion	Hauling	0.00	20.0	HHDT
Pipe Rehabilitaion	Onsite truck	—	—	HHDT
Rock Slope Protection	—	—	—	—
Rock Slope Protection	Worker	12.0	11.9	LDA,LDT1,LDT2
Rock Slope Protection	Vendor	0.00	9.10	HHDT,MHDT

Rock Slope Protection	Hauling	0.00	20.0	HHDT
Rock Slope Protection	Onsite truck	—	—	HHDT
Site Restoration	—	—	—	—
Site Restoration	Worker	8.00	11.9	LDA,LDT1,LDT2
Site Restoration	Vendor	—	9.10	HHDT,MHDT
Site Restoration	Hauling	0.00	20.0	HHDT
Site Restoration	Onsite truck	—	—	HHDT
Aggregate Base	—	—	—	—
Aggregate Base	Worker	14.0	11.9	LDA,LDT1,LDT2
Aggregate Base	Vendor	—	9.10	HHDT,MHDT
Aggregate Base	Hauling	0.00	20.0	HHDT
Aggregate Base	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Rock Slope Protection	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Clearing and Grubbing	—	—	67.5	0.00	—
Site Restoration	—	—	36.3	0.00	—
Levee Degrade	—	—	75.0	0.00	—
Aggregate Base	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Pipe Rehabilitation
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.93	0.78	7.29	13.6	0.02	0.19	0.05	0.19	0.17	0.01	0.17	—	2,050	2,050	0.08	0.02	0.27	2,057
Mit.	0.25	0.24	2.46	14.1	0.02	0.04	0.05	0.07	0.04	0.01	0.04	—	2,050	2,050	0.08	0.02	0.27	2,057
% Reduced	73%	69%	66%	-4%	—	80%	—	64%	79%	—	79%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.49	0.41	3.90	6.72	0.01	0.12	0.05	0.17	0.11	0.01	0.12	—	1,023	1,023	0.04	0.01	< 0.005	1,027
Mit.	0.13	0.12	1.24	7.04	0.01	0.02	0.05	0.07	0.02	0.01	0.03	—	1,023	1,023	0.04	0.01	< 0.005	1,027
% Reduced	74%	70%	68%	-5%	—	85%	—	60%	84%	—	76%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.04	0.41	0.70	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	107	107	< 0.005	< 0.005	0.01	107
Mit.	0.01	0.01	0.13	0.73	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	107	107	< 0.005	< 0.005	0.01	107
% Reduced	74%	70%	68%	-5%	—	85%	—	73%	84%	—	81%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.07	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	< 0.005	17.7
Mit.	< 0.005	< 0.005	0.02	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	< 0.005	17.7
% Reduced	74%	70%	68%	-5%	—	85%	—	73%	84%	—	81%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.49	0.41	3.90	6.78	0.01	0.12	0.05	0.17	0.11	0.01	0.12	—	1,028	1,028	0.04	0.01	0.19	1,032
2028	0.46	0.39	3.69	6.77	0.01	0.10	< 0.005	0.10	0.09	0.00	0.09	—	1,026	1,026	0.04	0.01	0.15	1,030
2029	0.93	0.78	7.29	13.6	0.02	0.19	0.01	0.19	0.17	0.00	0.17	—	2,050	2,050	0.08	0.02	0.27	2,057
2030	0.88	0.74	7.14	13.5	0.02	0.16	0.01	0.17	0.15	0.00	0.15	—	2,048	2,048	0.08	0.02	0.24	2,055
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.49	0.41	3.90	6.72	0.01	0.12	0.05	0.17	0.11	0.01	0.12	—	1,023	1,023	0.04	0.01	< 0.005	1,027
2028	0.46	0.39	3.69	6.72	0.01	0.10	< 0.005	0.10	0.09	0.00	0.09	—	1,021	1,021	0.04	0.01	< 0.005	1,025
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.05	0.04	0.41	0.70	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	107	107	< 0.005	< 0.005	0.01	107
2028	0.04	0.03	0.29	0.53	< 0.005	0.01	< 0.005	0.01	0.01	0.00	0.01	—	81.2	81.2	< 0.005	< 0.005	0.01	81.5
2029	0.02	0.01	0.13	0.24	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	36.4	36.4	< 0.005	< 0.005	< 0.005	36.5
2030	0.02	0.02	0.19	0.35	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	53.1	53.1	< 0.005	< 0.005	< 0.005	53.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.01	0.01	0.07	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	< 0.005	17.7
2028	0.01	0.01	0.05	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	13.4	13.4	< 0.005	< 0.005	< 0.005	13.5
2029	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	6.02	6.02	< 0.005	< 0.005	< 0.005	6.05
2030	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	8.79	8.79	< 0.005	< 0.005	< 0.005	8.83

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.13	0.13	1.24	7.10	0.01	0.02	0.05	0.07	0.02	0.01	0.03	—	1,028	1,028	0.04	0.01	0.19	1,032
2028	0.12	0.12	1.23	7.06	0.01	0.02	< 0.005	0.02	0.02	0.00	0.02	—	1,026	1,026	0.04	0.01	0.15	1,030
2029	0.25	0.24	2.46	14.1	0.02	0.04	0.01	0.04	0.04	0.00	0.04	—	2,050	2,050	0.08	0.02	0.27	2,057
2030	0.24	0.24	2.46	14.0	0.02	0.04	0.01	0.04	0.04	0.00	0.04	—	2,048	2,048	0.08	0.02	0.24	2,055
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.13	0.12	1.24	7.04	0.01	0.02	0.05	0.07	0.02	0.01	0.03	—	1,023	1,023	0.04	0.01	< 0.005	1,027
2028	0.12	0.12	1.24	7.00	0.01	0.02	< 0.005	0.02	0.02	0.00	0.02	—	1,021	1,021	0.04	0.01	< 0.005	1,025
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01	0.01	0.13	0.73	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	107	107	< 0.005	< 0.005	0.01	107
2028	0.01	0.01	0.10	0.56	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	81.2	81.2	< 0.005	< 0.005	0.01	81.5
2029	< 0.005	< 0.005	0.04	0.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	36.4	36.4	< 0.005	< 0.005	< 0.005	36.5
2030	0.01	0.01	0.06	0.36	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	53.1	53.1	< 0.005	< 0.005	< 0.005	53.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.02	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	< 0.005	17.7

2028	< 0.005	< 0.005	0.02	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	13.4	13.4	< 0.005	< 0.005	< 0.005	13.5
2029	< 0.005	< 0.005	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	6.02	6.02	< 0.005	< 0.005	< 0.005	6.05
2030	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	—	8.79	8.79	< 0.005	< 0.005	< 0.005	8.83

3. Construction Emissions Details

3.1. ID 3 - pipe rehabilitation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.15	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.3	37.3	< 0.005	< 0.005	—	37.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.18	6.18	< 0.005	< 0.005	—	6.20
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.3	54.3	< 0.005	< 0.005	0.19	55.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.1	49.1	< 0.005	< 0.005	< 0.005	49.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 3 - pipe rehabilitation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.3	37.3	< 0.005	< 0.005	—	37.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.18	6.18	< 0.005	< 0.005	—	6.20
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.3	54.3	< 0.005	< 0.005	0.19	55.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.1	49.1	< 0.005	< 0.005	< 0.005	49.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 4- pipe rehabilitation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.77	1.77	< 0.005	< 0.005	—	1.77
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	54.3	54.3	< 0.005	< 0.005	0.19	55.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 4- pipe rehabilitation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.77	1.77	< 0.005	< 0.005	—	1.77
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	54.3	54.3	< 0.005	< 0.005	0.19	55.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 1-pipe rehabilitation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.15	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.3	37.3	< 0.005	< 0.005	—	37.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.18	6.18	< 0.005	< 0.005	—	6.20

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	54.3	54.3	< 0.005	< 0.005	0.19	55.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 1-pipe rehabilitation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.3	37.3	< 0.005	< 0.005	—	37.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.18	6.18	< 0.005	< 0.005	—	6.20
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	54.3	54.3	< 0.005	< 0.005	0.19	55.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 5- Pipe rehabilitation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01	0.01	0.06	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.65	2.65	< 0.005	< 0.005	—	2.66
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	49.1	49.1	< 0.005	< 0.005	< 0.005	49.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 5- Pipe rehabilitation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.65	2.65	< 0.005	< 0.005	—	2.66
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	49.1	49.1	< 0.005	< 0.005	< 0.005	49.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 2- pipe rehabilitation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.67	6.52	0.01	0.10	—	0.10	0.09	—	0.09	—	973	973	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	47.4	47.4	< 0.005	< 0.005	< 0.005	48.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.68

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 2- pipe rehabilitation (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	973	973	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	47.4	47.4	< 0.005	< 0.005	< 0.005	48.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 7- pipe rehabilitation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.67	6.52	0.01	0.10	—	0.10	0.09	—	0.09	—	973	973	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.24	0.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.6	10.6	< 0.005	< 0.005	—	10.6
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.25	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	52.4	52.4	< 0.005	< 0.005	0.15	53.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.20	3.20	< 0.005	< 0.005	< 0.005	3.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 7- pipe rehabilitation (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	973	973	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.6	10.6	< 0.005	< 0.005	—	10.6

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.25	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	52.4	52.4	< 0.005	< 0.005	0.15	53.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.20	3.20	< 0.005	< 0.005	< 0.005	3.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. ID 8.b -pipe rehabilitation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.63	6.55	0.01	0.09	—	0.09	0.09	—	0.09	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.33	5.33	< 0.005	< 0.005	—	5.35
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.89
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	51.5	51.5	< 0.005	< 0.005	0.13	51.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. ID 8.b -pipe rehabilitation (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.33	5.33	< 0.005	< 0.005	—	5.35
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.89
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	51.5	51.5	< 0.005	< 0.005	0.13	51.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. ID 8.a- pipe rehabilitation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.63	6.55	0.01	0.09	—	0.09	0.09	—	0.09	—	974	974	0.04	0.01	—	977

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.3	29.3	< 0.005	< 0.005	—	29.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.87
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	51.5	51.5	< 0.005	< 0.005	0.13	51.7

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.44	1.44	< 0.005	< 0.005	< 0.005	1.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. ID 8.a- pipe rehabilitation (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.3	29.3	< 0.005	< 0.005	—	29.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.87
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	51.5	51.5	< 0.005	< 0.005	0.13	51.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.44	1.44	< 0.005	< 0.005	< 0.005	1.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. ID 8.e- pipe rehabilitation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.56	6.54	0.01	0.08	—	0.08	0.08	—	0.08	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.01	< 0.005	0.05	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.6	50.6	< 0.005	< 0.005	0.12	50.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. ID 8.e- pipe rehabilitation (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.6	50.6	< 0.005	< 0.005	0.12	50.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. ID 6- pipe rehabilitation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.56	6.54	0.01	0.08	—	0.08	0.08	—	0.08	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.7	26.7	< 0.005	< 0.005	—	26.8
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.42	4.42	< 0.005	< 0.005	—	4.43
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.6	50.6	< 0.005	< 0.005	0.12	50.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. ID 6- pipe rehabilitation (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.7	26.7	< 0.005	< 0.005	—	26.8
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.42	4.42	< 0.005	< 0.005	—	4.43

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.6	50.6	< 0.005	< 0.005	0.12	50.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. ID 11- pipe rehabilitation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.56	6.54	0.01	0.08	—	0.08	0.08	—	0.08	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.77	1.77	< 0.005	< 0.005	—	1.77
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.6	50.6	< 0.005	< 0.005	0.12	50.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. ID 11- pipe rehabilitation (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.77	1.77	< 0.005	< 0.005	—	1.77
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.6	50.6	< 0.005	< 0.005	0.12	50.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 3 - pipe rehabilitation	Site Preparation	3/24/2026	4/10/2026	5.00	14.0	—
ID 4- pipe rehabilitation	Site Preparation	8/4/2026	8/7/2026	5.00	4.00	—
ID 1-pipe rehabilitation	Site Preparation	9/1/2026	9/18/2026	5.00	14.0	—
ID 5- Pipe rehabilitation	Site Preparation	11/30/2026	12/7/2026	5.00	6.00	—
ID 2- pipe rehabilitation	Site Preparation	10/1/2028	10/8/2028	5.00	5.00	—
ID 7- pipe rehabilitation	Site Preparation	7/18/2028	8/20/2028	5.00	24.0	—
ID 8.b -pipe rehabilitation	Site Preparation	7/16/2029	7/17/2029	5.00	2.00	—
ID 8.a- pipe rehabilitation	Site Preparation	7/17/2029	7/31/2029	5.00	11.0	—
ID 8.e- pipe rehabilitation	Site Preparation	8/10/2030	8/16/2030	5.00	5.00	—
ID 6- pipe rehabilitation	Site Preparation	8/12/2030	8/24/2030	5.00	10.0	—
ID 11- pipe rehabilitation	Site Preparation	9/10/2030	9/13/2030	5.00	4.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3 - pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 3 - pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 3 - pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37

ID 4- pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 4- pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 4- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 1-pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 1-pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 1-pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 5- Pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 5- Pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 5- Pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 2- pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 2- pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 2- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 7- pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 7- pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 7- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.b -pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.b -pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.b -pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37

ID 8.a- pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.a- pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.a- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.e- pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.e- pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.e- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 6- pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 6- pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 6- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 11- pipe rehabilitation	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 11- pipe rehabilitation	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 11- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3 - pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 3 - pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 3 - pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

ID 4- pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 4- pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 4- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 1-pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 1-pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 1-pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 5- Pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 5- Pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 5- Pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 2- pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 2- pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 2- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 7- pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 7- pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 7- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.b -pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.b -pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.b -pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

ID 8.a- pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.a- pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.a- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.e- pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.e- pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.e- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 6- pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 6- pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 6- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 11- pipe rehabilitation	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 11- pipe rehabilitation	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 11- pipe rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3 - pipe rehabilitation	—	—	—	—
ID 3 - pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 3 - pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 3 - pipe rehabilitation	Hauling	0.00	20.0	HHDT

ID 3 - pipe rehabilitation	Onsite truck	—	—	HHDT
ID 4- pipe rehabilitation	—	—	—	—
ID 4- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 4- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 4- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 4- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 1-pipe rehabilitation	—	—	—	—
ID 1-pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 1-pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 1-pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 1-pipe rehabilitation	Onsite truck	—	—	HHDT
ID 5- Pipe rehabilitation	—	—	—	—
ID 5- Pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 5- Pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 5- Pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 5- Pipe rehabilitation	Onsite truck	—	—	HHDT
ID 2- pipe rehabilitation	—	—	—	—
ID 2- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 2- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 2- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 2- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 7- pipe rehabilitation	—	—	—	—
ID 7- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 7- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 7- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 7- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 8.b -pipe rehabilitation	—	—	—	—
ID 8.b -pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2

ID 8.b -pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 8.b -pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 8.b -pipe rehabilitation	Onsite truck	—	—	HHDT
ID 8.a- pipe rehabilitation	—	—	—	—
ID 8.a- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 8.a- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 8.a- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 8.a- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 8.e- pipe rehabilitation	—	—	—	—
ID 8.e- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 8.e- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 8.e- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 8.e- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 6- pipe rehabilitation	—	—	—	—
ID 6- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 6- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 6- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 6- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 11- pipe rehabilitation	—	—	—	—
ID 11- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 11- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 11- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 11- pipe rehabilitation	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3 - pipe rehabilitation	—	—	—	—
ID 3 - pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2

ID 3 - pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 3 - pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 3 - pipe rehabilitation	Onsite truck	—	—	HHDT
ID 4- pipe rehabilitation	—	—	—	—
ID 4- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 4- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 4- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 4- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 1-pipe rehabilitation	—	—	—	—
ID 1-pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 1-pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 1-pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 1-pipe rehabilitation	Onsite truck	—	—	HHDT
ID 5- Pipe rehabilitation	—	—	—	—
ID 5- Pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 5- Pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 5- Pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 5- Pipe rehabilitation	Onsite truck	—	—	HHDT
ID 2- pipe rehabilitation	—	—	—	—
ID 2- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 2- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 2- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 2- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 7- pipe rehabilitation	—	—	—	—
ID 7- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 7- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 7- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 7- pipe rehabilitation	Onsite truck	—	—	HHDT

ID 8.b -pipe rehabilitation	—	—	—	—
ID 8.b -pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 8.b -pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 8.b -pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 8.b -pipe rehabilitation	Onsite truck	—	—	HHDT
ID 8.a- pipe rehabilitation	—	—	—	—
ID 8.a- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 8.a- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 8.a- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 8.a- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 8.e- pipe rehabilitation	—	—	—	—
ID 8.e- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 8.e- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 8.e- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 8.e- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 6- pipe rehabilitation	—	—	—	—
ID 6- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 6- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 6- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 6- pipe rehabilitation	Onsite truck	—	—	HHDT
ID 11- pipe rehabilitation	—	—	—	—
ID 11- pipe rehabilitation	Worker	6.00	11.9	LDA,LDT1,LDT2
ID 11- pipe rehabilitation	Vendor	—	9.10	HHDT,MHDT
ID 11- pipe rehabilitation	Hauling	0.00	20.0	HHDT
ID 11- pipe rehabilitation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 3 - pipe rehabilitation	—	—	0.00	—	—
ID 4- pipe rehabilitation	—	—	0.00	0.00	—
ID 1-pipe rehabilitation	—	—	0.00	0.00	—
ID 5- Pipe rehabilitation	—	—	0.00	0.00	—
ID 2- pipe rehabilitation	—	—	0.00	0.00	—
ID 7- pipe rehabilitation	—	—	0.00	0.00	—
ID 8.b -pipe rehabilitation	—	—	0.00	0.00	—
ID 8.a- pipe rehabilitation	—	—	0.00	0.00	—
ID 8.e- pipe rehabilitation	—	—	0.00	0.00	—
ID 6- pipe rehabilitation	—	—	0.00	0.00	—
ID 11- pipe rehabilitation	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Rock Slope
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	0.44	3.91	7.07	0.01	0.12	0.10	0.22	0.11	0.02	0.14	—	1,082	1,082	0.04	0.01	0.37	1,087
Mit.	0.15	0.15	1.25	7.38	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,082	1,082	0.04	0.01	0.37	1,087
% Reduced	70%	66%	68%	-5%	—	85%	—	47%	84%	—	69%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	0.43	3.92	6.94	0.01	0.12	0.10	0.22	0.11	0.02	0.14	—	1,072	1,072	0.04	0.01	0.01	1,077
Mit.	0.15	0.15	1.26	7.26	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,072	1,072	0.04	0.01	0.01	1,077
% Reduced	71%	66%	68%	-5%	—	85%	—	47%	84%	—	69%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.01	0.13	0.23	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	34.8	34.8	< 0.005	< 0.005	0.01	34.9
Mit.	< 0.005	< 0.005	0.04	0.24	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	34.8	34.8	< 0.005	< 0.005	0.01	34.9
% Reduced	71%	66%	68%	-5%	—	85%	—	46%	84%	—	69%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.76	5.76	< 0.005	< 0.005	< 0.005	5.79
Mit.	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.76	5.76	< 0.005	< 0.005	< 0.005	5.79
% Reduced	71%	66%	68%	-5%	—	85%	—	46%	84%	—	69%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.51	0.44	3.91	7.07	0.01	0.12	0.10	0.22	0.11	0.02	0.14	—	1,082	1,082	0.04	0.01	0.37	1,087
2027	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2028	0.49	0.41	3.70	7.02	0.01	0.10	0.10	0.20	0.09	0.02	0.11	—	1,078	1,078	0.04	0.01	0.30	1,083
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	0.46	0.39	3.58	6.97	0.01	0.08	0.10	0.18	0.08	0.02	0.10	—	1,075	1,075	0.04	0.01	0.24	1,079
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.51	0.43	3.92	6.94	0.01	0.12	0.10	0.22	0.11	0.02	0.14	—	1,072	1,072	0.04	0.01	0.01	1,077
2027	0.40	0.35	3.05	5.62	0.01	0.09	0.10	0.19	0.08	0.02	0.10	—	876	876	0.03	0.01	0.01	880
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	0.48	0.41	3.66	6.92	0.01	0.09	0.10	0.19	0.09	0.02	0.11	—	1,067	1,067	0.04	0.01	0.01	1,071
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.01	0.13	0.23	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	34.8	34.8	< 0.005	< 0.005	0.01	34.9
2027	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.41	2.41	< 0.005	< 0.005	< 0.005	2.42
2028	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.87	5.87	< 0.005	< 0.005	< 0.005	5.89

2029	0.01	0.01	0.05	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	< 0.005	14.7
2030	0.01	0.01	0.06	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	< 0.005	17.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.76	5.76	< 0.005	< 0.005	< 0.005	5.79
2027	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.40
2028	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98
2029	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.43
2030	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.90	2.90	< 0.005	< 0.005	< 0.005	2.92

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.15	0.15	1.25	7.38	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,082	1,082	0.04	0.01	0.37	1,087
2027	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2028	0.15	0.14	1.25	7.31	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,078	1,078	0.04	0.01	0.30	1,083
2029	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	0.14	0.14	1.24	7.24	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,075	1,075	0.04	0.01	0.24	1,079
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.15	0.15	1.26	7.26	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,072	1,072	0.04	0.01	0.01	1,077
2027	0.12	0.12	1.01	5.87	0.01	0.01	0.10	0.12	0.01	0.02	0.04	—	876	876	0.03	0.01	0.01	880
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	0.14	0.14	1.25	7.17	0.01	0.02	0.10	0.12	0.02	0.02	0.04	—	1,067	1,067	0.04	0.01	0.01	1,071
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	< 0.005	< 0.005	0.04	0.24	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	34.8	34.8	< 0.005	< 0.005	0.01	34.9
2027	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.41	2.41	< 0.005	< 0.005	< 0.005	2.42
2028	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.87	5.87	< 0.005	< 0.005	< 0.005	5.89
2029	< 0.005	< 0.005	0.02	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	< 0.005	14.7
2030	< 0.005	< 0.005	0.02	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	< 0.005	17.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.76	5.76	< 0.005	< 0.005	< 0.005	5.79
2027	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.40
2028	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98
2029	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.43
2030	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.90	2.90	< 0.005	< 0.005	< 0.005	2.92

3. Construction Emissions Details

3.1. ID 3- rock slope (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.65	2.65	< 0.005	< 0.005	—	2.66
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 3- rock slope (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.02	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.65	2.65	< 0.005	< 0.005	—	2.66
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 4- rock slope (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.44	0.44	< 0.005	< 0.005	—	0.44
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 4- rock slope (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.44	0.44	< 0.005	< 0.005	—	0.44
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 1-Rock slope (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	3.11	5.19	0.01	0.10	—	0.10	0.09	—	0.09	—	779	779	0.03	0.01	—	782
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.13	2.13	< 0.005	< 0.005	—	2.14
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 1-Rock slope (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.98	5.44	0.01	0.01	—	0.01	0.01	—	0.01	—	779	779	0.03	0.01	—	782
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.13	2.13	< 0.005	< 0.005	—	2.14
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	109	109	< 0.005	< 0.005	0.37	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 5- rock slope (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.39	3.88	6.49	0.01	0.12	—	0.12	0.11	—	0.11	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.77	1.77	< 0.005	< 0.005	—	1.77
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.2	98.2	< 0.005	< 0.005	0.01	99.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 5- rock slope (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.77	1.77	< 0.005	< 0.005	—	1.77
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.2	98.2	< 0.005	< 0.005	0.01	99.6

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 2-Rock slope (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	3.02	5.20	0.01	0.09	—	0.09	0.08	—	0.08	—	779	779	0.03	0.01	—	782
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.13	2.13	< 0.005	< 0.005	—	2.14
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.42	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	96.7	96.7	< 0.005	< 0.005	0.01	98.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 2-Rock slope (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.98	5.44	0.01	0.01	—	0.01	0.01	—	0.01	—	779	779	0.03	0.01	—	782
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.13	2.13	< 0.005	< 0.005	—	2.14

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.42	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	96.7	96.7	< 0.005	< 0.005	0.01	98.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 7- rock slope (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.67	6.52	0.01	0.10	—	0.10	0.09	—	0.09	—	973	973	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.33	5.33	< 0.005	< 0.005	—	5.35

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.89
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.50	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.30	106
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 7- rock slope (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	973	973	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.33	5.33	< 0.005	< 0.005	—	5.35
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.89
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.50	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.30	106
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. ID 8.a- rock slope (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.63	6.55	0.01	0.09	—	0.09	0.09	—	0.09	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.01	0.01	0.05	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.1	93.1	< 0.005	< 0.005	0.01	94.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. ID 8.a- rock slope (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.1	93.1	< 0.005	< 0.005	0.01	94.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. ID 8.e- rock slope (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.56	6.54	0.01	0.08	—	0.08	0.08	—	0.08	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.44	0.44	< 0.005	< 0.005	—	0.44
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. ID 8.e- rock slope (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.44	0.44	< 0.005	< 0.005	—	0.44

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. ID 6- rock slope (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.56	6.54	0.01	0.08	—	0.08	0.08	—	0.08	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. ID 6- rock slope (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.10	0.10	1.22	6.81	0.01	0.02	—	0.02	0.02	—	0.02	—	974	974	0.04	0.01	—	977
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.21	2.21	< 0.005	< 0.005	—	2.22
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.24	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 3- rock slope	Site Preparation	5/25/2026	6/1/2026	5.00	6.00	—
ID 4- rock slope	Site Preparation	8/8/2026	8/10/2026	5.00	1.00	—
ID 1-Rock slope	Site Preparation	9/19/2026	9/21/2026	5.00	1.00	—
ID 5- rock slope	Site Preparation	12/8/2026	12/11/2026	5.00	4.00	—
ID 2-Rock slope	Site Preparation	10/9/2027	10/11/2027	5.00	1.00	—
ID 7- rock slope	Site Preparation	8/26/2028	8/29/2028	5.00	2.00	—
ID 8.a- rock slope	Site Preparation	10/1/2029	10/7/2029	5.00	5.00	—
ID 8.e- rock slope	Site Preparation	8/17/2030	8/19/2030	5.00	1.00	—
ID 6- rock slope	Site Preparation	9/2/2030	9/6/2030	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3- rock slope	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 3- rock slope	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 3- rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 4- rock slope	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 4- rock slope	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40

ID 4- rock slope	Tractors/Loaders/Back	Diesel	Average	1.00	10.0	84.0	0.37
ID 1-Rock slope	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
ID 1-Rock slope	Other Material Handling Equipment	Diesel	Average	1.00	8.00	93.0	0.40
ID 1-Rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
ID 5- rock slope	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 5- rock slope	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 5- rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 2-Rock slope	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
ID 2-Rock slope	Other Material Handling Equipment	Diesel	Average	1.00	8.00	93.0	0.40
ID 2-Rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
ID 7- rock slope	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 7- rock slope	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 7- rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.a- rock slope	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.a- rock slope	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.a- rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.e- rock slope	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.e- rock slope	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 8.e- rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 6- rock slope	Excavators	Diesel	Average	1.00	10.0	36.0	0.38

ID 6- rock slope	Other Material Handling Equipment	Diesel	Average	1.00	10.0	93.0	0.40
ID 6- rock slope	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3- rock slope	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 3- rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 3- rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 4- rock slope	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 4- rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 4- rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 1-Rock slope	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
ID 1-Rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	8.00	93.0	0.40
ID 1-Rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
ID 5- rock slope	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 5- rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 5- rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 2-Rock slope	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
ID 2-Rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	8.00	93.0	0.40
ID 2-Rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37

ID 7- rock slope	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 7- rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 7- rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.a- rock slope	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.a- rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.a- rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.e- rock slope	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.e- rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 8.e- rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 6- rock slope	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 6- rock slope	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	10.0	93.0	0.40
ID 6- rock slope	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3- rock slope	—	—	—	—
ID 3- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 3- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 3- rock slope	Hauling	0.00	20.0	HHDT
ID 3- rock slope	Onsite truck	—	—	HHDT
ID 4- rock slope	—	—	—	—

ID 4- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 4- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 4- rock slope	Hauling	0.00	20.0	HHDT
ID 4- rock slope	Onsite truck	—	—	HHDT
ID 1-Rock slope	—	—	—	—
ID 1-Rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 1-Rock slope	Vendor	—	9.10	HHDT,MHDT
ID 1-Rock slope	Hauling	0.00	20.0	HHDT
ID 1-Rock slope	Onsite truck	—	—	HHDT
ID 2-Rock slope	—	—	—	—
ID 2-Rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 2-Rock slope	Vendor	—	9.10	HHDT,MHDT
ID 2-Rock slope	Hauling	0.00	20.0	HHDT
ID 2-Rock slope	Onsite truck	—	—	HHDT
ID 5- rock slope	—	—	—	—
ID 5- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 5- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 5- rock slope	Hauling	0.00	20.0	HHDT
ID 5- rock slope	Onsite truck	—	—	HHDT
ID 7- rock slope	—	—	—	—
ID 7- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 7- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 7- rock slope	Hauling	0.00	20.0	HHDT
ID 7- rock slope	Onsite truck	—	—	HHDT
ID 8.a- rock slope	—	—	—	—
ID 8.a- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 8.a- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 8.a- rock slope	Hauling	0.00	20.0	HHDT

ID 8.a- rock slope	Onsite truck	—	—	HHDT
ID 8.e- rock slope	—	—	—	—
ID 8.e- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 8.e- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 8.e- rock slope	Hauling	0.00	20.0	HHDT
ID 8.e- rock slope	Onsite truck	—	—	HHDT
ID 6- rock slope	—	—	—	—
ID 6- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 6- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 6- rock slope	Hauling	0.00	20.0	HHDT
ID 6- rock slope	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3- rock slope	—	—	—	—
ID 3- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 3- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 3- rock slope	Hauling	0.00	20.0	HHDT
ID 3- rock slope	Onsite truck	—	—	HHDT
ID 4- rock slope	—	—	—	—
ID 4- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 4- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 4- rock slope	Hauling	0.00	20.0	HHDT
ID 4- rock slope	Onsite truck	—	—	HHDT
ID 1-Rock slope	—	—	—	—
ID 1-Rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 1-Rock slope	Vendor	—	9.10	HHDT,MHDT
ID 1-Rock slope	Hauling	0.00	20.0	HHDT

ID 1-Rock slope	Onsite truck	—	—	HHDT
ID 2-Rock slope	—	—	—	—
ID 2-Rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 2-Rock slope	Vendor	—	9.10	HHDT,MHDT
ID 2-Rock slope	Hauling	0.00	20.0	HHDT
ID 2-Rock slope	Onsite truck	—	—	HHDT
ID 5- rock slope	—	—	—	—
ID 5- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 5- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 5- rock slope	Hauling	0.00	20.0	HHDT
ID 5- rock slope	Onsite truck	—	—	HHDT
ID 7- rock slope	—	—	—	—
ID 7- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 7- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 7- rock slope	Hauling	0.00	20.0	HHDT
ID 7- rock slope	Onsite truck	—	—	HHDT
ID 8.a- rock slope	—	—	—	—
ID 8.a- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 8.a- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 8.a- rock slope	Hauling	0.00	20.0	HHDT
ID 8.a- rock slope	Onsite truck	—	—	HHDT
ID 8.e- rock slope	—	—	—	—
ID 8.e- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2
ID 8.e- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 8.e- rock slope	Hauling	0.00	20.0	HHDT
ID 8.e- rock slope	Onsite truck	—	—	HHDT
ID 6- rock slope	—	—	—	—
ID 6- rock slope	Worker	12.0	11.9	LDA,LDT1,LDT2

ID 6- rock slope	Vendor	—	9.10	HHDT,MHDT
ID 6- rock slope	Hauling	0.00	20.0	HHDT
ID 6- rock slope	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
ID 7- rock slope	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 3- rock slope	—	—	0.00	0.00	—
ID 4- rock slope	—	—	0.00	0.00	—
ID 1-Rock slope	—	—	0.00	0.00	—
ID 5- rock slope	—	—	0.00	0.00	—
ID 2-Rock slope	—	—	0.00	0.00	—
ID 7- rock slope	—	—	0.00	0.00	—
ID 8.a- rock slope	—	—	0.00	0.00	—
ID 8.e- rock slope	—	—	0.00	0.00	—

ID 6- rock slope	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Sbslurry
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.28	1.92	16.3	15.8	0.03	0.68	3.36	4.04	0.62	1.68	2.30	—	2,908	2,908	0.11	0.03	0.62	2,920
Mit.	0.85	0.75	5.42	15.5	0.03	0.19	3.36	3.55	0.17	1.68	1.85	—	2,908	2,908	0.11	0.03	0.62	2,920
% Reduced	63%	61%	67%	2%	—	73%	—	12%	72%	—	19%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.28	1.91	16.3	15.6	0.03	0.68	3.36	4.04	0.62	1.68	2.30	—	2,891	2,891	0.12	0.03	0.02	2,902
Mit.	0.85	0.75	5.43	15.3	0.03	0.19	3.36	3.55	0.17	1.68	1.85	—	2,891	2,891	0.12	0.03	0.02	2,902
% Reduced	63%	61%	67%	2%	—	73%	—	12%	72%	—	19%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.61	0.51	4.38	4.19	0.01	0.18	0.90	1.08	0.17	0.45	0.62	—	776	776	0.03	0.01	0.07	779
Mit.	0.23	0.20	1.46	4.11	0.01	0.05	0.90	0.95	0.05	0.45	0.50	—	776	776	0.03	0.01	0.07	779
% Reduced	63%	61%	67%	2%	—	73%	—	12%	72%	—	19%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.80	0.77	< 0.005	0.03	0.16	0.20	0.03	0.08	0.11	—	128	128	0.01	< 0.005	0.01	129
Mit.	0.04	0.04	0.27	0.75	< 0.005	0.01	0.16	0.17	0.01	0.08	0.09	—	128	128	0.01	< 0.005	0.01	129
% Reduced	63%	61%	67%	2%	—	73%	—	12%	72%	—	19%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.28	1.92	16.3	15.8	0.03	0.68	3.36	4.04	0.62	1.68	2.30	—	2,908	2,908	0.11	0.03	0.62	2,920
2027	2.22	1.87	15.8	15.5	0.03	0.64	3.36	4.01	0.59	1.68	2.27	—	2,905	2,905	0.11	0.03	0.56	2,917
2028	1.78	1.50	12.5	12.6	0.02	0.50	2.72	3.23	0.46	1.35	1.82	—	2,357	2,357	0.09	0.02	0.50	2,367
2029	2.16	1.81	14.9	15.3	0.03	0.60	3.36	3.97	0.55	1.68	2.24	—	2,898	2,898	0.11	0.02	0.45	2,909
2030	2.12	1.78	14.6	15.4	0.03	0.59	3.36	3.95	0.54	1.68	2.22	—	2,895	2,895	0.11	0.02	0.39	2,906
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.28	1.91	16.3	15.6	0.03	0.68	3.36	4.04	0.62	1.68	2.30	—	2,891	2,891	0.12	0.03	0.02	2,902
2027	2.21	1.86	15.8	15.3	0.03	0.64	3.36	4.01	0.59	1.68	2.27	—	2,888	2,888	0.12	0.03	0.01	2,900
2028	1.77	1.49	12.5	12.4	0.02	0.50	2.72	3.23	0.46	1.35	1.82	—	2,341	2,341	0.09	0.02	0.01	2,350
2029	2.16	1.81	14.9	15.2	0.03	0.60	3.36	3.97	0.55	1.68	2.24	—	2,882	2,882	0.11	0.03	0.01	2,893
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.61	0.51	4.38	4.19	0.01	0.18	0.90	1.08	0.17	0.45	0.62	—	776	776	0.03	0.01	0.07	779
2027	0.47	0.40	3.39	3.29	0.01	0.14	0.72	0.86	0.13	0.36	0.49	—	619	619	0.02	0.01	0.05	622
2028	0.31	0.26	2.19	2.17	< 0.005	0.09	0.48	0.57	0.08	0.24	0.32	—	411	411	0.02	< 0.005	0.04	413

2029	0.42	0.35	2.91	2.95	0.01	0.12	0.65	0.77	0.11	0.33	0.43	—	561	561	0.02	0.01	0.04	564
2030	0.19	0.16	1.28	1.34	< 0.005	0.05	0.29	0.35	0.05	0.15	0.20	—	253	253	0.01	< 0.005	0.01	254
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.80	0.77	< 0.005	0.03	0.16	0.20	0.03	0.08	0.11	—	128	128	0.01	< 0.005	0.01	129
2027	0.09	0.07	0.62	0.60	< 0.005	0.03	0.13	0.16	0.02	0.07	0.09	—	103	103	< 0.005	< 0.005	0.01	103
2028	0.06	0.05	0.40	0.40	< 0.005	0.02	0.09	0.10	0.01	0.04	0.06	—	68.1	68.1	< 0.005	< 0.005	0.01	68.3
2029	0.08	0.06	0.53	0.54	< 0.005	0.02	0.12	0.14	0.02	0.06	0.08	—	92.9	92.9	< 0.005	< 0.005	0.01	93.3
2030	0.03	0.03	0.23	0.24	< 0.005	0.01	0.05	0.06	0.01	0.03	0.04	—	41.8	41.8	< 0.005	< 0.005	< 0.005	42.0

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.85	0.75	5.42	15.5	0.03	0.19	3.36	3.55	0.17	1.68	1.85	—	2,908	2,908	0.11	0.03	0.62	2,920
2027	0.85	0.75	5.40	15.5	0.03	0.18	3.36	3.55	0.17	1.68	1.85	—	2,905	2,905	0.11	0.03	0.56	2,917
2028	0.68	0.61	4.32	12.5	0.02	0.14	2.72	2.87	0.14	1.35	1.49	—	2,357	2,357	0.09	0.02	0.50	2,367
2029	0.83	0.73	5.37	15.3	0.03	0.18	3.36	3.54	0.17	1.68	1.85	—	2,898	2,898	0.11	0.02	0.45	2,909
2030	0.82	0.73	5.35	15.3	0.03	0.18	3.36	3.54	0.17	1.68	1.85	—	2,895	2,895	0.11	0.02	0.39	2,906
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.85	0.75	5.43	15.3	0.03	0.19	3.36	3.55	0.17	1.68	1.85	—	2,891	2,891	0.12	0.03	0.02	2,902
2027	0.84	0.74	5.41	15.3	0.03	0.18	3.36	3.55	0.17	1.68	1.85	—	2,888	2,888	0.12	0.03	0.01	2,900
2028	0.68	0.60	4.32	12.3	0.02	0.14	2.72	2.87	0.14	1.35	1.49	—	2,341	2,341	0.09	0.02	0.01	2,350
2029	0.83	0.72	5.38	15.2	0.03	0.18	3.36	3.54	0.17	1.68	1.85	—	2,882	2,882	0.11	0.03	0.01	2,893
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.23	0.20	1.46	4.11	0.01	0.05	0.90	0.95	0.05	0.45	0.50	—	776	776	0.03	0.01	0.07	779
2027	0.18	0.16	1.16	3.27	0.01	0.04	0.72	0.76	0.04	0.36	0.40	—	619	619	0.02	0.01	0.05	622
2028	0.12	0.10	0.76	2.16	< 0.005	0.03	0.48	0.50	0.02	0.24	0.26	—	411	411	0.02	< 0.005	0.04	413
2029	0.16	0.14	1.05	2.95	0.01	0.03	0.65	0.69	0.03	0.33	0.36	—	561	561	0.02	0.01	0.04	564
2030	0.07	0.06	0.47	1.33	< 0.005	0.02	0.29	0.31	0.01	0.15	0.16	—	253	253	0.01	< 0.005	0.01	254
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.04	0.04	0.27	0.75	< 0.005	0.01	0.16	0.17	0.01	0.08	0.09	—	128	128	0.01	< 0.005	0.01	129
2027	0.03	0.03	0.21	0.60	< 0.005	0.01	0.13	0.14	0.01	0.07	0.07	—	103	103	< 0.005	< 0.005	0.01	103
2028	0.02	0.02	0.14	0.39	< 0.005	< 0.005	0.09	0.09	< 0.005	0.04	0.05	—	68.1	68.1	< 0.005	< 0.005	0.01	68.3
2029	0.03	0.03	0.19	0.54	< 0.005	0.01	0.12	0.13	0.01	0.06	0.07	—	92.9	92.9	< 0.005	< 0.005	0.01	93.3
2030	0.01	0.01	0.09	0.24	< 0.005	< 0.005	0.05	0.06	< 0.005	0.03	0.03	—	41.8	41.8	< 0.005	< 0.005	< 0.005	42.0

3. Construction Emissions Details

3.1. ID 1- SB slurry wall (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.20	1.84	16.3	14.9	0.03	0.68	—	0.68	0.62	—	0.62	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.19	3.19	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.89	0.81	< 0.005	0.04	—	0.04	0.03	—	0.03	—	149	149	0.01	< 0.005	—	150
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.7	24.7	< 0.005	< 0.005	—	24.8
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.20	9.20	< 0.005	< 0.005	0.01	9.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 1- SB slurry wall (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.67	5.37	14.6	0.03	0.19	—	0.19	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.19	3.19	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.04	0.04	0.29	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	149	149	0.01	< 0.005	—	150
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.7	24.7	< 0.005	< 0.005	—	24.8
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.20	9.20	< 0.005	< 0.005	0.01	9.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 7- Slurry wall (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.20	1.84	16.3	14.9	0.03	0.68	—	0.68	0.62	—	0.62	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.20	1.84	16.3	14.9	0.03	0.68	—	0.68	0.62	—	0.62	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	3.47	3.17	0.01	0.14	—	0.14	0.13	—	0.13	—	582	582	0.02	< 0.005	—	584
Dust From Material Movement	—	—	—	—	—	—	0.68	0.68	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.63	0.58	< 0.005	0.03	—	0.03	0.02	—	0.02	—	96.3	96.3	< 0.005	< 0.005	—	96.6
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.8	35.8	< 0.005	< 0.005	0.06	36.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.93	5.93	< 0.005	< 0.005	0.01	6.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 7- Slurry wall (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.67	5.37	14.6	0.03	0.19	—	0.19	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.77	0.67	5.37	14.6	0.03	0.19	—	0.19	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.15	3.11	0.01	0.04	—	0.04	0.04	—	0.04	—	582	582	0.02	< 0.005	—	584
Dust From Material Movement	—	—	—	—	—	—	0.68	0.68	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.21	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	96.3	96.3	< 0.005	< 0.005	—	96.6
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.8	35.8	< 0.005	< 0.005	0.06	36.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.93	5.93	< 0.005	< 0.005	0.01	6.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 7- Slurry wall (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.14	1.79	15.8	14.6	0.03	0.64	—	0.64	0.59	—	0.59	—	2,727	2,727	0.11	0.02	—	2,737

Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.47	2.29	< 0.005	0.10	—	0.10	0.09	—	0.09	—	427	427	0.02	< 0.005	—	428
Dust From Material Movement	—	—	—	—	—	—	0.50	0.50	—	0.26	0.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.42	< 0.005	0.02	—	0.02	0.02	—	0.02	—	70.7	70.7	< 0.005	< 0.005	—	70.9
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.70	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	0.01	0.01	163

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.9	25.9	< 0.005	< 0.005	0.04	26.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.28	4.28	< 0.005	< 0.005	0.01	4.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 7- Slurry wall (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.67	5.35	14.6	0.03	0.18	—	0.18	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,737
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.84	2.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	427	427	0.02	< 0.005	—	428
Dust From Material Movement	—	—	—	—	—	—	0.50	0.50	—	0.26	0.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.42	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	70.7	70.7	< 0.005	< 0.005	—	70.9
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.70	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	0.01	0.01	163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.9	25.9	< 0.005	< 0.005	0.04	26.2

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.28	4.28	< 0.005	< 0.005	0.01	4.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 2- SB slurry wall (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.14	1.79	15.8	14.6	0.03	0.64	—	0.64	0.59	—	0.59	—	2,727	2,727	0.11	0.02	—	2,737
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.91	0.84	< 0.005	0.04	—	0.04	0.03	—	0.03	—	157	157	0.01	< 0.005	—	157

Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.90	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	178	178	< 0.005	0.01	0.56	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.50	9.50	< 0.005	< 0.005	0.01	9.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.57	1.57	< 0.005	< 0.005	< 0.005	1.60

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 2- SB slurry wall (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.67	5.35	14.6	0.03	0.18	—	0.18	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,737
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.31	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	157	157	0.01	< 0.005	—	157
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.90	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	178	178	< 0.005	0.01	0.56	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.50	9.50	< 0.005	< 0.005	0.01	9.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.57	1.57	< 0.005	< 0.005	< 0.005	1.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 8.a -SB slurry wall (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.43	12.4	11.7	0.02	0.50	—	0.50	0.46	—	0.46	—	2,183	2,183	0.09	0.02	—	2,190
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.43	12.4	11.7	0.02	0.50	—	0.50	0.46	—	0.46	—	2,183	2,183	0.09	0.02	—	2,190
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.18	2.06	< 0.005	0.09	—	0.09	0.08	—	0.08	—	383	383	0.02	< 0.005	—	384

Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.40	0.38	< 0.005	0.02	—	0.02	0.01	—	0.01	—	63.4	63.4	< 0.005	< 0.005	—	63.6
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	175	175	< 0.005	0.01	0.50	177
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.01	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.4	28.4	< 0.005	< 0.005	0.04	28.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.70	4.70	< 0.005	< 0.005	0.01	4.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 8.a -SB slurry wall (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.54	4.27	11.6	0.02	0.14	—	0.14	0.14	—	0.14	—	2,183	2,183	0.09	0.02	—	2,190
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.54	4.27	11.6	0.02	0.14	—	0.14	0.14	—	0.14	—	2,183	2,183	0.09	0.02	—	2,190
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	2.04	< 0.005	0.03	—	0.03	0.02	—	0.02	—	383	383	0.02	< 0.005	—	384
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.4	63.4	< 0.005	< 0.005	—	63.6
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	175	175	< 0.005	0.01	0.50	177
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.01	160

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.4	28.4	< 0.005	< 0.005	0.04	28.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.70	4.70	< 0.005	< 0.005	0.01	4.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. ID 6- SB slurry wall (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.09	1.75	14.9	14.5	0.03	0.60	—	0.60	0.55	—	0.55	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.09	1.75	14.9	14.5	0.03	0.60	—	0.60	0.55	—	0.55	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	2.90	2.83	0.01	0.12	—	0.12	0.11	—	0.11	—	530	530	0.02	< 0.005	—	532
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.32	0.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	87.8	87.8	< 0.005	< 0.005	—	88.1
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.78	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	172	172	< 0.005	< 0.005	0.45	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	155	155	< 0.005	0.01	0.01	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.9	30.9	< 0.005	< 0.005	0.04	31.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.12	5.12	< 0.005	< 0.005	0.01	5.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. ID 6- SB slurry wall (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.67	5.33	14.6	0.03	0.18	—	0.18	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.67	5.33	14.6	0.03	0.18	—	0.18	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.04	2.83	0.01	0.03	—	0.03	0.03	—	0.03	—	530	530	0.02	< 0.005	—	532
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.32	0.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.52	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.8	87.8	< 0.005	< 0.005	—	88.1
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.78	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	172	172	< 0.005	< 0.005	0.45	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	155	155	< 0.005	0.01	0.01	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.9	30.9	< 0.005	< 0.005	0.04	31.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.12	5.12	< 0.005	< 0.005	0.01	5.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. ID 8.d- SB slurry wall (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.06	1.72	14.6	14.7	0.03	0.59	—	0.59	0.54	—	0.54	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.28	1.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	239	239	0.01	< 0.005	—	240
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.14	0.14	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.6	39.6	< 0.005	< 0.005	—	39.7

Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.03	0.03	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	< 0.005	< 0.005	0.39	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.27	2.27	< 0.005	< 0.005	< 0.005	2.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. ID 8.d- SB slurry wall (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.67	5.32	14.6	0.03	0.18	—	0.18	0.17	—	0.17	—	2,727	2,727	0.11	0.02	—	2,736
Dust From Material Movement	—	—	—	—	—	—	3.20	3.20	—	1.64	1.64	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.47	1.28	< 0.005	0.02	—	0.02	0.01	—	0.01	—	239	239	0.01	< 0.005	—	240
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.14	0.14	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.6	39.6	< 0.005	< 0.005	—	39.7
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.03	0.03	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	< 0.005	< 0.005	0.39	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.27	2.27	< 0.005	< 0.005	< 0.005	2.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 1- SB slurry wall	Site Preparation	7/19/2026	8/14/2026	5.00	20.0	—
ID 7- Slurry wall	Site Preparation	9/14/2026	3/21/2027	5.00	135	—
ID 2- SB slurry wall	Site Preparation	8/20/2027	9/18/2027	5.00	21.0	—
ID 8.a -SB slurry wall	Site Preparation	8/22/2028	11/18/2028	5.00	64.0	—
ID 6- SB slurry wall	Site Preparation	9/7/2029	12/14/2029	5.00	71.0	—
ID 8.d- SB slurry wall	Site Preparation	7/22/2030	9/3/2030	5.00	32.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

ID 1- SB slurry wall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 1- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 1- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 1- SB slurry wall	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 1- SB slurry wall	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 7- Slurry wall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 7- Slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 7- Slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 7- Slurry wall	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 7- Slurry wall	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 2- SB slurry wall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 2- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 2- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 2- SB slurry wall	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 2- SB slurry wall	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37
ID 8.a -SB slurry wall	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
ID 8.a -SB slurry wall	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
ID 8.a -SB slurry wall	Pumps	Diesel	Average	2.00	8.00	11.0	0.74
ID 8.a -SB slurry wall	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
ID 8.a -SB slurry wall	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
ID 6- SB slurry wall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 6- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 6- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 6- SB slurry wall	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 6- SB slurry wall	Tractors/Loaders/Back hoes	Diesel	Average	1.00	10.0	84.0	0.37

ID 8.d- SB slurry wall	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 8.d- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 8.d- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 8.d- SB slurry wall	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 8.d- SB slurry wall	Tractors/Loaders/Backhoes	Diesel	Average	1.00	10.0	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 1- SB slurry wall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 1- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 1- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 1- SB slurry wall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 1- SB slurry wall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 7- Slurry wall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 7- Slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 7- Slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 7- Slurry wall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 7- Slurry wall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 2- SB slurry wall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 2- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 2- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 2- SB slurry wall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 2- SB slurry wall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.a -SB slurry wall	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
ID 8.a -SB slurry wall	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74

ID 8.a -SB slurry wall	Pumps	Diesel	Average	2.00	8.00	11.0	0.74
ID 8.a -SB slurry wall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
ID 8.a -SB slurry wall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
ID 6- SB slurry wall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 6- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 6- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 6- SB slurry wall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 6- SB slurry wall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37
ID 8.d- SB slurry wall	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 8.d- SB slurry wall	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
ID 8.d- SB slurry wall	Pumps	Diesel	Average	2.00	10.0	11.0	0.74
ID 8.d- SB slurry wall	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 8.d- SB slurry wall	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	10.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 1- SB slurry wall	—	—	—	—
ID 1- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 1- SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 1- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 1- SB slurry wall	Onsite truck	—	—	HHDT
ID 7- Slurry wall	—	—	—	—
ID 7- Slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 7- Slurry wall	Vendor	—	9.10	HHDT,MHDT

ID 7- Slurry wall	Hauling	0.00	20.0	HHDT
ID 7- Slurry wall	Onsite truck	—	—	HHDT
ID 2- SB slurry wall	—	—	—	—
ID 2- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 2- SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 2- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 2- SB slurry wall	Onsite truck	—	—	HHDT
ID 8.a -SB slurry wall	—	—	—	—
ID 8.a -SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 8.a -SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 8.a -SB slurry wall	Hauling	0.00	20.0	HHDT
ID 8.a -SB slurry wall	Onsite truck	—	—	HHDT
ID 6- SB slurry wall	—	—	—	—
ID 6- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 6- SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 6- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 6- SB slurry wall	Onsite truck	—	—	HHDT
ID 8.d- SB slurry wall	—	—	—	—
ID 8.d- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 8.d- SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 8.d- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 8.d- SB slurry wall	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 1- SB slurry wall	—	—	—	—
ID 1- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 1- SB slurry wall	Vendor	—	9.10	HHDT,MHDT

ID 1- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 1- SB slurry wall	Onsite truck	—	—	HHDT
ID 7- Slurry wall	—	—	—	—
ID 7- Slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 7- Slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 7- Slurry wall	Hauling	0.00	20.0	HHDT
ID 7- Slurry wall	Onsite truck	—	—	HHDT
ID 2- SB slurry wall	—	—	—	—
ID 2- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 2- SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 2- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 2- SB slurry wall	Onsite truck	—	—	HHDT
ID 8.a -SB slurry wall	—	—	—	—
ID 8.a -SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 8.a -SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 8.a -SB slurry wall	Hauling	0.00	20.0	HHDT
ID 8.a -SB slurry wall	Onsite truck	—	—	HHDT
ID 6- SB slurry wall	—	—	—	—
ID 6- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 6- SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 6- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 6- SB slurry wall	Onsite truck	—	—	HHDT
ID 8.d- SB slurry wall	—	—	—	—
ID 8.d- SB slurry wall	Worker	20.0	11.9	LDA,LDT1,LDT2
ID 8.d- SB slurry wall	Vendor	—	9.10	HHDT,MHDT
ID 8.d- SB slurry wall	Hauling	0.00	20.0	HHDT
ID 8.d- SB slurry wall	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
ID 8.d- SB slurry wall	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 1- SB slurry wall	200	200	12.5	0.00	—
ID 7- Slurry wall	2,100	2,100	84.4	0.00	—
ID 2- SB slurry wall	300	300	13.1	0.00	—
ID 8.a -SB slurry wall	800	800	32.0	0.00	—
ID 6- SB slurry wall	900	900	44.4	0.00	—
ID 8.d- SB slurry wall	400	400	20.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mossdale-Seepage Berm
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.837429, -121.318989
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2133
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Recreational	1.00	User Defined Unit	835	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.54	4.67	40.7	46.0	0.09	1.70	5.00	6.70	1.57	1.87	3.43	—	10,075	10,075	0.40	0.09	0.85	10,112
Mit.	1.06	1.06	6.38	56.5	0.09	0.18	5.00	5.19	0.18	1.87	2.05	—	10,075	10,075	0.40	0.09	0.85	10,112
% Reduced	81%	77%	84%	-23%	—	89%	—	23%	88%	—	40%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.54	4.66	40.7	45.7	0.09	1.70	5.00	6.70	1.57	1.87	3.43	—	10,051	10,051	0.40	0.09	0.02	10,087
Mit.	1.06	1.05	6.39	56.3	0.09	0.18	5.00	5.19	0.18	1.87	2.05	—	10,051	10,051	0.40	0.09	0.02	10,087
% Reduced	81%	78%	84%	-23%	—	89%	—	23%	88%	—	40%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.96	1.65	14.4	16.2	0.03	0.60	1.76	2.37	0.55	0.66	1.21	—	3,554	3,554	0.14	0.03	0.13	3,567
Mit.	0.37	0.37	2.26	19.9	0.03	0.07	1.76	1.83	0.07	0.66	0.72	—	3,554	3,554	0.14	0.03	0.13	3,567
% Reduced	81%	78%	84%	-23%	—	89%	—	23%	88%	—	40%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.30	2.62	2.95	0.01	0.11	0.32	0.43	0.10	0.12	0.22	—	588	588	0.02	0.01	0.02	591
Mit.	0.07	0.07	0.41	3.63	0.01	0.01	0.32	0.33	0.01	0.12	0.13	—	588	588	0.02	0.01	0.02	591
% Reduced	81%	78%	84%	-23%	—	89%	—	23%	88%	—	40%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	5.54	4.67	40.7	46.0	0.09	1.70	4.99	6.70	1.57	1.87	3.43	—	10,075	10,075	0.40	0.09	0.85	10,112
2027	5.36	4.51	38.2	45.5	0.09	1.58	5.00	6.58	1.46	1.87	3.32	—	10,071	10,071	0.40	0.09	0.77	10,108
2028	5.22	4.40	36.2	45.3	0.09	1.48	4.99	6.47	1.36	1.87	3.23	—	10,066	10,066	0.40	0.09	0.69	10,103
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	5.54	4.66	40.7	45.7	0.09	1.70	4.99	6.70	1.57	1.87	3.43	—	10,051	10,051	0.40	0.09	0.02	10,087
2027	5.35	4.51	38.2	45.3	0.09	1.58	5.00	6.58	1.46	1.87	3.32	—	10,047	10,047	0.40	0.09	0.02	10,084
2028	5.21	4.38	36.3	45.1	0.09	1.48	4.99	6.47	1.36	1.87	3.23	—	10,043	10,043	0.40	0.09	0.02	10,079
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.96	1.65	14.4	16.2	0.03	0.60	1.76	2.37	0.55	0.66	1.21	—	3,554	3,554	0.14	0.03	0.13	3,567
2027	0.60	0.51	4.29	5.09	0.01	0.18	0.56	0.74	0.16	0.21	0.37	—	1,129	1,129	0.05	0.01	0.04	1,133
2028	1.01	0.85	7.05	8.78	0.02	0.29	0.97	1.26	0.27	0.36	0.63	—	1,955	1,955	0.08	0.02	0.06	1,962
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.36	0.30	2.62	2.95	0.01	0.11	0.32	0.43	0.10	0.12	0.22	—	588	588	0.02	0.01	0.02	591
2027	0.11	0.09	0.78	0.93	< 0.005	0.03	0.10	0.13	0.03	0.04	0.07	—	187	187	0.01	< 0.005	0.01	188
2028	0.18	0.16	1.29	1.60	< 0.005	0.05	0.18	0.23	0.05	0.07	0.11	—	324	324	0.01	< 0.005	0.01	325

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.06	1.06	6.38	56.5	0.09	0.18	4.99	5.18	0.18	1.87	2.05	—	10,075	10,075	0.40	0.09	0.85	10,112
2027	1.06	1.05	6.37	56.4	0.09	0.18	5.00	5.19	0.18	1.87	2.05	—	10,071	10,071	0.40	0.09	0.77	10,108
2028	1.05	1.05	6.37	56.3	0.09	0.18	4.99	5.18	0.18	1.87	2.05	—	10,066	10,066	0.40	0.09	0.69	10,103
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.06	1.05	6.39	56.3	0.09	0.18	4.99	5.18	0.18	1.87	2.05	—	10,051	10,051	0.40	0.09	0.02	10,087
2027	1.04	1.04	6.39	56.2	0.09	0.18	5.00	5.19	0.18	1.87	2.05	—	10,047	10,047	0.40	0.09	0.02	10,084
2028	1.04	1.03	6.38	56.1	0.09	0.18	4.99	5.18	0.18	1.87	2.05	—	10,043	10,043	0.40	0.09	0.02	10,079
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.37	0.37	2.26	19.9	0.03	0.07	1.76	1.83	0.07	0.66	0.72	—	3,554	3,554	0.14	0.03	0.13	3,567
2027	0.12	0.12	0.72	6.31	0.01	0.02	0.56	0.58	0.02	0.21	0.23	—	1,129	1,129	0.05	0.01	0.04	1,133
2028	0.20	0.20	1.24	10.9	0.02	0.04	0.97	1.01	0.04	0.36	0.40	—	1,955	1,955	0.08	0.02	0.06	1,962
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07	0.07	0.41	3.63	0.01	0.01	0.32	0.33	0.01	0.12	0.13	—	588	588	0.02	0.01	0.02	591
2027	0.02	0.02	0.13	1.15	< 0.005	< 0.005	0.10	0.11	< 0.005	0.04	0.04	—	187	187	0.01	< 0.005	0.01	188
2028	0.04	0.04	0.23	1.99	< 0.005	0.01	0.18	0.18	0.01	0.07	0.07	—	324	324	0.01	< 0.005	0.01	325

3. Construction Emissions Details

3.1. ID 3- seepage berm (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.43	4.56	40.6	44.6	0.09	1.70	—	1.70	1.57	—	1.57	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.43	4.56	40.6	44.6	0.09	1.70	—	1.70	1.57	—	1.57	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.25	1.05	9.34	10.3	0.02	0.39	—	0.39	0.36	—	0.36	—	2,261	2,261	0.09	0.02	—	2,269
Dust From Material Movement	—	—	—	—	—	—	1.10	1.10	—	0.42	0.42	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.71	1.87	< 0.005	0.07	—	0.07	0.07	—	0.07	—	374	374	0.02	< 0.005	—	376
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.07	1.32	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	249	249	< 0.005	0.01	0.85	253
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.05	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	0.01	0.01	0.02	228
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.1	53.1	< 0.005	< 0.005	0.08	53.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.79	8.79	< 0.005	< 0.005	0.01	8.92

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. ID 3- seepage berm (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.22	0.22	1.45	12.7	0.02	0.04	—	0.04	0.04	—	0.04	—	2,261	2,261	0.09	0.02	—	2,269
Dust From Material Movement	—	—	—	—	—	—	1.10	1.10	—	0.42	0.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.04	0.04	0.26	2.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	374	374	0.02	< 0.005	—	376
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.07	1.32	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	249	249	< 0.005	0.01	0.85	253
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.05	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	0.01	0.01	0.02	228
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.1	53.1	< 0.005	< 0.005	0.08	53.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.79	8.79	< 0.005	< 0.005	0.01	8.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. ID 4- seepage berm (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.43	4.56	40.6	44.6	0.09	1.70	—	1.70	1.57	—	1.57	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.67	0.73	< 0.005	0.03	—	0.03	0.03	—	0.03	—	162	162	0.01	< 0.005	—	162

Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.13	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	26.7	26.7	< 0.005	< 0.005	—	26.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.07	1.32	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	249	249	< 0.005	0.01	0.85	253
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.79	3.79	< 0.005	< 0.005	0.01	3.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. ID 4- seepage berm (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	0.91	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	162	162	0.01	< 0.005	—	162
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.7	26.7	< 0.005	< 0.005	—	26.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.07	1.32	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	249	249	< 0.005	0.01	0.85	253
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.79	3.79	< 0.005	< 0.005	0.01	3.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. ID 5- seepage berm (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.43	4.56	40.6	44.6	0.09	1.70	—	1.70	1.57	—	1.57	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	4.34	4.77	0.01	0.18	—	0.18	0.17	—	0.17	—	1,050	1,050	0.04	0.01	—	1,053
Dust From Material Movement	—	—	—	—	—	—	0.51	0.51	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.79	0.87	< 0.005	0.03	—	0.03	0.03	—	0.03	—	174	174	0.01	< 0.005	—	174

Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.05	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	0.01	0.01	0.02	228
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.7	24.7	< 0.005	< 0.005	0.04	25.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.08	4.08	< 0.005	< 0.005	0.01	4.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. ID 5- seepage berm (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,826	9,826	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.67	5.90	0.01	0.02	—	0.02	0.02	—	0.02	—	1,050	1,050	0.04	0.01	—	1,053
Dust From Material Movement	—	—	—	—	—	—	0.51	0.51	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	174	174	0.01	< 0.005	—	174
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.05	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	0.01	0.01	0.02	228
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.7	24.7	< 0.005	< 0.005	0.04	25.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.08	4.08	< 0.005	< 0.005	0.01	4.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. ID 12- seepage berm (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	5.25	4.41	38.1	44.3	0.09	1.58	—	1.58	1.46	—	1.46	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.77	4.77	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.25	4.41	38.1	44.3	0.09	1.58	—	1.58	1.46	—	1.46	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.77	4.77	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.28	4.98	0.01	0.18	—	0.18	0.16	—	0.16	—	1,104	1,104	0.04	0.01	—	1,107
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.11	0.09	0.78	0.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	183	183	0.01	< 0.005	—	183
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.06	1.23	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	245	245	< 0.005	0.01	0.77	249
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.97	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	222	222	0.01	0.01	0.02	225
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.5	25.5	< 0.005	< 0.005	0.04	25.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.22	4.22	< 0.005	< 0.005	0.01	4.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. ID 12- seepage berm (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.77	4.77	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.77	4.77	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.71	6.20	0.01	0.02	—	0.02	0.02	—	0.02	—	1,104	1,104	0.04	0.01	—	1,107

Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	1.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	183	183	0.01	< 0.005	—	183
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.06	1.23	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	245	245	< 0.005	0.01	0.77	249
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.97	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	222	222	0.01	0.01	0.02	225
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.5	25.5	< 0.005	< 0.005	0.04	25.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.22	4.22	< 0.005	< 0.005	0.01	4.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. ID 15- seepage berm (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.12	4.30	36.2	44.2	0.09	1.48	—	1.48	1.36	—	1.36	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.12	4.30	36.2	44.2	0.09	1.48	—	1.48	1.36	—	1.36	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	0.84	7.04	8.60	0.02	0.29	—	0.29	0.27	—	0.27	—	1,911	1,911	0.08	0.02	—	1,918
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.28	1.57	< 0.005	0.05	—	0.05	0.05	—	0.05	—	316	316	0.01	< 0.005	—	318
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.15	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	240	240	< 0.005	0.01	0.69	244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.91	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	0.01	0.01	0.02	220

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.06	43.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.17	7.17	< 0.005	< 0.005	0.01	7.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. ID 15- seepage berm (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.95	0.95	6.31	55.2	0.09	0.18	—	0.18	0.18	—	0.18	—	9,825	9,825	0.40	0.08	—	9,859
Dust From Material Movement	—	—	—	—	—	—	4.76	4.76	—	1.81	1.81	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	1.23	10.7	0.02	0.04	—	0.04	0.04	—	0.04	—	1,911	1,911	0.08	0.02	—	1,918
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	1.96	< 0.005	0.01	—	0.01	0.01	—	0.01	—	316	316	0.01	< 0.005	—	318
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.15	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	240	240	< 0.005	0.01	0.69	244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.91	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	0.01	0.01	0.02	220
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.06	43.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.17	7.17	< 0.005	< 0.005	0.01	7.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
ID 3- seepage berm	Site Preparation	1/27/2026	5/24/2026	5.00	84.0	—
ID 4- seepage berm	Site Preparation	7/26/2026	8/3/2026	5.00	6.00	—
ID 5- seepage berm	Site Preparation	10/6/2026	11/29/2026	5.00	39.0	—
ID 12- seepage berm	Site Preparation	2/26/2027	4/24/2027	5.00	41.0	—
ID 15- seepage berm	Site Preparation	1/23/2028	5/1/2028	5.00	71.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3- seepage berm	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 3- seepage berm	Graders	Diesel	Average	2.00	10.0	148	0.41
ID 3- seepage berm	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 3- seepage berm	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 3- seepage berm	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 3- seepage berm	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 3- seepage berm	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 4- seepage berm	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 4- seepage berm	Graders	Diesel	Average	2.00	10.0	148	0.41

ID 4- seepage berm	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 4- seepage berm	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 4- seepage berm	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 4- seepage berm	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 4- seepage berm	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 5- seepage berm	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 5- seepage berm	Graders	Diesel	Average	2.00	10.0	148	0.41
ID 5- seepage berm	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 5- seepage berm	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 5- seepage berm	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 5- seepage berm	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 5- seepage berm	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 12- seepage berm	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 12- seepage berm	Graders	Diesel	Average	2.00	10.0	148	0.41
ID 12- seepage berm	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 12- seepage berm	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 12- seepage berm	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40
ID 12- seepage berm	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 12- seepage berm	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
ID 15- seepage berm	Excavators	Diesel	Average	1.00	10.0	36.0	0.38
ID 15- seepage berm	Graders	Diesel	Average	2.00	10.0	148	0.41
ID 15- seepage berm	Other Material Handling Equipment	Diesel	Average	2.00	10.0	93.0	0.40
ID 15- seepage berm	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
ID 15- seepage berm	Rubber Tired Dozers	Diesel	Average	1.00	10.0	367	0.40

ID 15- seepage berm	Scrapers	Diesel	Average	2.00	10.0	423	0.48
ID 15- seepage berm	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
ID 3- seepage berm	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 3- seepage berm	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 3- seepage berm	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 3- seepage berm	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 3- seepage berm	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 3- seepage berm	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 3- seepage berm	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 4- seepage berm	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 4- seepage berm	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 4- seepage berm	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 4- seepage berm	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 4- seepage berm	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 4- seepage berm	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 4- seepage berm	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 5- seepage berm	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 5- seepage berm	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 5- seepage berm	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 5- seepage berm	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 5- seepage berm	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40

ID 5- seepage berm	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 5- seepage berm	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 12- seepage berm	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 12- seepage berm	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 12- seepage berm	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 12- seepage berm	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 12- seepage berm	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 12- seepage berm	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 12- seepage berm	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
ID 15- seepage berm	Excavators	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 15- seepage berm	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
ID 15- seepage berm	Other Material Handling Equipment	Diesel	Tier 4 Final	2.00	10.0	93.0	0.40
ID 15- seepage berm	Rollers	Diesel	Tier 4 Final	1.00	10.0	36.0	0.38
ID 15- seepage berm	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	10.0	367	0.40
ID 15- seepage berm	Scrapers	Diesel	Tier 4 Final	2.00	10.0	423	0.48
ID 15- seepage berm	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3- seepage berm	—	—	—	—
ID 3- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 3- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 3- seepage berm	Hauling	0.00	20.0	HHDT

ID 3- seepage berm	Onsite truck	—	—	HHDT
ID 4- seepage berm	—	—	—	—
ID 4- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 4- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 4- seepage berm	Hauling	0.00	20.0	HHDT
ID 4- seepage berm	Onsite truck	—	—	HHDT
ID 5- seepage berm	—	—	—	—
ID 5- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 5- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 5- seepage berm	Hauling	0.00	20.0	HHDT
ID 5- seepage berm	Onsite truck	—	—	HHDT
ID 12- seepage berm	—	—	—	—
ID 12- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 12- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 12- seepage berm	Hauling	0.00	20.0	HHDT
ID 12- seepage berm	Onsite truck	—	—	HHDT
ID 15- seepage berm	—	—	—	—
ID 15- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 15- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 15- seepage berm	Hauling	0.00	20.0	HHDT
ID 15- seepage berm	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
ID 3- seepage berm	—	—	—	—
ID 3- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 3- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 3- seepage berm	Hauling	0.00	20.0	HHDT

ID 3- seepage berm	Onsite truck	—	—	HHDT
ID 4- seepage berm	—	—	—	—
ID 4- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 4- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 4- seepage berm	Hauling	0.00	20.0	HHDT
ID 4- seepage berm	Onsite truck	—	—	HHDT
ID 5- seepage berm	—	—	—	—
ID 5- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 5- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 5- seepage berm	Hauling	0.00	20.0	HHDT
ID 5- seepage berm	Onsite truck	—	—	HHDT
ID 12- seepage berm	—	—	—	—
ID 12- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 12- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 12- seepage berm	Hauling	0.00	20.0	HHDT
ID 12- seepage berm	Onsite truck	—	—	HHDT
ID 15- seepage berm	—	—	—	—
ID 15- seepage berm	Worker	27.5	11.9	LDA,LDT1,LDT2
ID 15- seepage berm	Vendor	—	9.10	HHDT,MHDT
ID 15- seepage berm	Hauling	0.00	20.0	HHDT
ID 15- seepage berm	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
ID 3- seepage berm	49,200	—	368	0.00	—
ID 4- seepage berm	2,900	—	26.3	0.00	—
ID 5- seepage berm	19,700	—	171	0.00	—
ID 12- seepage berm	35,200	—	179	0.00	—
ID 15- seepage berm	36,400	—	311	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

B-2 Emissions Summary4

	UNMITIGATED					MITIGATED					
	ROG	NOx	PM10T	PM2.5T	CO_2e		ROG	NOx	PM10T	PM2.5T	CO_2e
All other						All other					
2026	0.71	8.28	1.63	0.68	2,534	2026	0.13	3.06	1.07	0.35	2,534
2027	0.6	6.65	1.41	0.59	2,309	2027	0.16	2.62	1.14	0.4	2,309
2028	0.5	5.03	1.02	0.45	1,466	2028	0.11	1.61	0.7	0.25	1,466
2029	0.21	2.22	0.5	0.21	838	2029	0.08	0.98	0.43	0.17	838
2030	0.22	2.34	0.52	0.21	984	2030	0.06	1.06	0.47	0.17	984
floodwall						floodwall					
2029	0.07	0.51	0.06	0.03	168	2029	0.02	0.13	0.04	0.02	168
ID 9						ID 9					
2028	0.09	0.72	0.19	0.08	171	2028	0.03	0.16	0.16	0.06	171
2029	0.01	0.06	0.01	< 0.005	20	2029	< 0.005	0.02	< 0.005	< 0.005	20
ID 10						ID 10					
2030	0.2	1.53	0.25	0.11	403	2030	0.06	0.38	0.2	0.07	403
Keyway						Keyway					
2027	0.03	0.29	0.09	0.05	50	2027	0.01	0.03	0.08	0.04	50
Pipe rehab						Pipe rehab					
2026	0.01	0.07	< 0.005	< 0.005	18	2026	< 0.005	0.02	< 0.005	< 0.005	18
2028	0.01	0.05	< 0.005	< 0.005	14	2028	< 0.005	0.02	< 0.005	< 0.005	14
2029	< 0.005	0.02	< 0.005	< 0.005	6	2029	< 0.005	0.01	< 0.005	< 0.005	6
2030	< 0.005	0.03	< 0.005	< 0.005	9	2030	< 0.005	0.01	< 0.005	< 0.005	9
Seepage berm						Seepage berm					
2026	0.3	2.62	0.43	0.22	591	2026	0.07	0.41	0.33	0.13	591
2027	0.09	0.78	0.13	0.07	188	2027	0.02	0.13	0.11	0.04	188
2028	0.16	1.29	0.23	0.11	325	2028	0.04	0.23	0.18	0.07	325

FRRC											
YEAR	ROG	NOx	PM10	PM2.5	CO2e	YEAR	ROG	NOx	PM10	PM2.5	CO2e
2026	1.02	10.97	2.06	0.9	3,143	2026	0.2	3.49	1.4	0.48	3,143
2027	0.72	7.72	1.63	0.71	2,547	2027	0.19	2.78	1.33	0.48	2,547
2028	0.76	7.09	1.44	0.64	1,975	2028	0.18	2.02	1.04	0.38	1,975
2029	0.29	2.81	0.57	0.24	1,032	2029	0.1	1.14	0.47	0.19	1,032
2030	0.42	3.9	0.77	0.32	1,396	2030	0.12	1.45	0.67	0.24	1,396

TOTAL PROJECT (FRRC and ERS)											
YEAR	ROG	NOx	PM10	PM2.5	CO2e	YEAR	ROG	NOx	PM10	PM2.5	CO2e
2026	1.91	19.22	3.6	1.68	5,412	2026	0.43	5.37	2.66	1.02	5,412
2027	0.72	7.72	1.63	0.71	2,547	2027	0.19	2.78	1.33	0.48	2,547
2028	0.76	7.09	1.44	0.64	1,975	2028	0.18	2.02	1.04	0.38	1,975
2029	0.29	2.81	0.57	0.24	1,032	2029	0.1	1.14	0.47	0.19	1,032
2030	0.42	3.9	0.77	0.32	1,396	2030	0.12	1.45	0.67	0.24	1,396

TOTAL PROJECT (FRRC and ERS)											
YEAR	ROG	NOx	PM10	PM2.5	CO2e	YEAR	ROG	NOx	PM10	PM2.5	CO2e
2026	2.67	26.91	5.04	2.35	7,577	2026	0.60	7.52	3.72	1.43	7,577
2027	1.01	10.81	2.28	0.99	3,566	2027	0.27	3.89	1.86	0.67	3,566
2028	1.06	9.93	2.02	0.90	2,765	2028	0.25	2.83	1.46	0.53	2,765
2029	0.41	3.93	0.80	0.34	1,445	2029	0.14	1.60	0.66	0.27	1,445
2030	0.59	5.46	1.08	0.45	1,955	2030	0.17	2.03	0.94	0.34	1,955

Note: Emissions have been scaled to reflect a worst case scenario of construction occuring for 7 days a week

B-3 AERMOD Inputs and Outputs Output

For HRA ***PM10 Exhaust*** ***TPY***

		ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7	ID 8a	ID 8b	ID 8c	ID 8d	ID 8e	ID 9	ID 10	ID 11	ID 12	ID 15	ID 13	ID 14	ID 15
Onsite Construction Equipment (unmitigated)	2026	1.76E-02		9.47E-02	1.71E-01	4.30E-02		7.87E-02											1.49E-01	1.07E-01	4.97E-02
	2027		1.79E-02					2.26E-02									4.74E-02	4.26E-02			
	2028							1.93E-03	4.97E-02					3.01E-02				5.77E-02			
	2029						3.88E-02		4.44E-03	1.08E-02	1.79E-02			2.09E-03							
	2030						2.20E-03					1.92E-02	1.68E-02		6.22E-02	7.65E-03					
Vendor Trck Trips	2026	1.32E-05		4.86E-05	5.02E-06	1.30E-05		7.82E-05											7.82E-06	6.62E-06	3.01E-06
	2027		1.16E-05					7.27E-05									3.41E-05	1.45E-04			
	2028								7.91E-05									1.25E-04			
	2029						4.33E-05		3.65E-05	8.02E-06	4.01E-06										
	2030						1.95E-05					1.30E-05	6.82E-06			4.41E-06					
Haul Truck Trips	2026	7.03E-03		1.23E-02	2.78E-03	7.14E-03		1.47E-02											4.15E-03	3.51E-03	1.60E-03
	2027		5.79E-03					1.37E-02									1.12E-02	4.45E-02			
	2028								1.49E-02									3.85E-02			
	2029						1.23E-02		6.87E-03	2.46E-03	9.13E-04										
	2030						5.53E-03					6.79E-03	3.58E-03			1.24E-03					

DPM and $PM_{2.5}$ Emissions Summary

Project ID	AERMOD Source	Source Group	Run No.	Construction Year	Start Date	End Date	Uncontrolled PM_{10} Exhaust	Tier 4 Final PM_{10} Exhaust
ID 1	ARLN11	10	1	2026	7/3/2026	10/2/2026	0.02	
ID 2	ARLN12	11	1	2027	8/1/2027	10/18/2027	0.02	
ID 3	ARLN13	12	1	2026	1/2/2026	6/20/2026	0.09	
ID 4	PAREA1	13	1	2026	7/19/2026	8/21/2026	0.17	
ID 5	ARLN14	14	1	2026	9/19/2026	12/20/2026	0.04	
ID 6	ARLN15	15	1	2029	8/3/2029	12/14/2029	0.04	
ID 6	ARLN15			2030	7/20/2030	9/23/2030	0.00	
ID 7	ARLN16	16	2	2026	7/3/2026	12/31/2026	0.08	
ID 7	ARLN16			2027	1/1/2027	12/26/2027	0.02	
ID 7	ARLN16			2028	7/18/2028	10/14/2028	0.00	
ID 8abcd	ARLN10	17	2	2028	7/1/2028	12/31/2028	0.05	
ID 8abcd	ARLN10			2029	1/1/2029	11/20/2029	0.03	
ID 8abcd	ARLN10			2030	7/1/2030	9/28/2030	0.02	
ID 9	ARLN17	18	2	2028	7/1/2028	12/15/2028	0.03	
ID 9	ARLN17			2029	7/17/2029	10/30/2029	0.00	
ID 10	ARLN18	19	2	2030	5/25/2030	10/19/2030	0.02	
ID 8e	ARLN22	10	3	2030	7/1/2030	8/30/2030	0.02	
ID 11	ARLN19	20	3	2030	9/2/2030	10/6/2030	0.01	
ID 12	ARLN20	21	3	2027	1/12/2027	5/15/2027	0.05	
ID 15	ARLN21	22	3	2027	6/7/2027	12/31/2027	0.04	
ID 15	ARLN21			2028	1/1/2028	6/23/2028	0.06	
ID 13	PAREA1	11	3	2026	3/2/2026	12/13/2026	0.15	
ID 14 & 16	PAREA2	12	3	2026	3/2/2026	12/1/2026	0.16	
Access Route	**AERMOD Source**	**Source Group**	**Run No.**	**Construction Year**	**Start Date**	**End Date**	**Uncontrolled PM_{10} Exhaust**	**Tier 4 Final PM_{10} Exhaust**
AR1	ARLN1	1	1	2026	7/3/2026	10/2/2026	1.22E-04	
AR1	ARLN1			2027	8/1/2027	10/20/2027	5.05E-05	
AR7	ARLN2	2	2	2026	7/3/2026	12/31/2026	1.87E-04	
AR7	ARLN2			2027	1/1/2027	6/18/2027	1.73E-04	
AR8	ARLN3	3	2	2026	7/3/2026	12/31/2026	9.29E-05	
AR8	ARLN3			2027	1/1/2027	6/18/2027	8.63E-05	
AR9	ARLN4	4	2	2026	7/3/2026	12/31/2026	6.77E-05	
AR9	ARLN4			2027	1/1/2027	6/18/2027	6.29E-05	
AR10	ARLN5	5	2	2028	7/1/2028	12/31/2028	3.86E-05	
AR10	ARLN5			2029	1/1/2029	9/29/2029	2.33E-03	
AR10	ARLN5			2028	7/1/2030	9/28/2030	1.75E-05	
AR15	ARLN6	6	3	2030	9/7/2030	10/8/2030	8.73E-06	
AR15	ARLN6			2027	1/18/2027	5/15/2027	3.94E-05	
AR17	ARLN7	7	3	2027	6/13/2027	12/31/2027	1.62E-04	
AR17	ARLN7			2028	1/1/2028	6/23/2028	1.40E-04	
AR18	ARLN8	8	3	2027	6/13/2027	12/31/2027	1.54E-04	
AR18	ARLN8			2028	1/1/2028	6/23/2028	1.33E-04	
AR19	ARLN9	9	3	2027	6/13/2027	12/31/2027	1.53E-04	
AR19	ARLN9			2028	1/1/2028	6/23/2028	1.32E-04	

Mossdale Construction HRA

Summary of AERMOD Source Outputs for All Offsite Receptors - Part 1

X	Y	Lookup	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	AR1
					Construction				Truck Route
647190.61	4195739.7	647190.61_4195739.7	0.35846	30.14887	0.41805	0.09251	0.07134	0.0414	83.63782
647210.61	4195739.7	647210.61_4195739.7	0.36354	24.90667	0.41218	0.0916	0.0708	0.04124	89.2662
647230.61	4195739.7	647230.61_4195739.7	0.36861	20.7708	0.40767	0.09077	0.07024	0.04114	92.93603
647250.61	4195739.7	647250.61_4195739.7	0.37366	17.50881	0.40436	0.09001	0.06967	0.0411	95.8548
647270.61	4195739.7	647270.61_4195739.7	0.37861	14.8986	0.40191	0.08931	0.06909	0.04111	98.26062
647290.61	4195739.7	647290.61_4195739.7	0.38363	12.80935	0.40028	0.08862	0.0685	0.04118	100.78397
647310.61	4195739.7	647310.61_4195739.7	0.38848	11.10446	0.39904	0.088	0.06791	0.04129	102.808
647330.61	4195739.7	647330.61_4195739.7	0.39327	9.7165	0.39818	0.08741	0.06732	0.04143	104.84903
647350.61	4195739.7	647350.61_4195739.7	0.39793	8.57575	0.39746	0.08684	0.06673	0.0416	106.78197
647370.61	4195739.7	647370.61_4195739.7	0.40246	7.632	0.39678	0.08634	0.06615	0.04179	108.72901
647390.61	4195739.7	647390.61_4195739.7	0.40688	6.8425	0.39599	0.08588	0.06557	0.042	110.86576
647410.61	4195739.7	647410.61_4195739.7	0.41126	6.17973	0.39502	0.08543	0.065	0.04222	113.37874
647430.61	4195739.7	647430.61_4195739.7	0.41571	5.61982	0.39384	0.08502	0.06445	0.04244	116.28235
647450.61	4195739.7	647450.61_4195739.7	0.42014	5.14006	0.39227	0.08462	0.06391	0.04268	119.2166
647190.61	4195759.7	647190.61_4195759.7	0.36877	31.62984	0.39969	0.09131	0.07064	0.04104	36.51569
647210.61	4195759.7	647210.61_4195759.7	0.37417	25.83989	0.39394	0.09041	0.07011	0.04089	39.39645
647230.61	4195759.7	647230.61_4195759.7	0.37952	21.23129	0.38945	0.08961	0.06957	0.0408	41.66604
647250.61	4195759.7	647250.61_4195759.7	0.38487	17.62365	0.38615	0.08885	0.069	0.04077	43.45671
647270.61	4195759.7	647270.61_4195759.7	0.39017	14.79119	0.38377	0.08815	0.06843	0.04079	44.88703
647290.61	4195759.7	647290.61_4195759.7	0.39544	12.55631	0.38209	0.08749	0.06785	0.04086	46.03026
647310.61	4195759.7	647310.61_4195759.7	0.40064	10.79062	0.38098	0.08688	0.06726	0.04097	47.04111
647330.61	4195759.7	647330.61_4195759.7	0.40571	9.38053	0.38019	0.08629	0.06668	0.04111	47.88516
647350.61	4195759.7	647350.61_4195759.7	0.41064	8.24474	0.37962	0.08572	0.0661	0.04129	48.61338
647370.61	4195759.7	647370.61_4195759.7	0.41542	7.31835	0.37911	0.08523	0.06552	0.04148	49.24403
647390.61	4195759.7	647390.61_4195759.7	0.4201	6.5547	0.37858	0.08479	0.06495	0.04169	49.82474
647410.61	4195759.7	647410.61_4195759.7	0.42471	5.91747	0.3779	0.08435	0.06439	0.0419	50.34228
647430.61	4195759.7	647430.61_4195759.7	0.42934	5.38124	0.37705	0.08395	0.06384	0.04213	50.88676
647450.61	4195759.7	647450.61_4195759.7	0.43401	4.92502	0.37591	0.08354	0.0633	0.04237	51.43931
647470.61	4195759.7	647470.61_4195759.7	0.43862	4.53116	0.37438	0.0832	0.06278	0.04261	51.8428
647490.61	4195759.7	647490.61_4195759.7	0.44325	4.1895	0.37249	0.08288	0.06228	0.04287	52.22014
647510.61	4195759.7	647510.61_4195759.7	0.44781	3.89018	0.37021	0.08263	0.06179	0.04314	52.48523
647530.61	4195759.7	647530.61_4195759.7	0.45245	3.62675	0.36757	0.08238	0.06132	0.04343	52.71658
647550.61	4195759.7	647550.61_4195759.7	0.45731	3.3934	0.36464	0.08215	0.06087	0.04374	52.89983
647570.61	4195759.7	647570.61_4195759.7	0.46235	3.18283	0.36132	0.08201	0.06042	0.04405	52.53816
647590.61	4195759.7	647590.61_4195759.7	0.46808	2.99458	0.35785	0.08189	0.06	0.04438	52.06231
647610.61	4195759.7	647610.61_4195759.7	0.47467	2.82486	0.35424	0.0818	0.0596	0.0447	51.18986
647630.61	4195759.7	647630.61_4195759.7	0.48231	2.67145	0.35057	0.08176	0.05922	0.04503	49.68585
647650.61	4195759.7	647650.61_4195759.7	0.49086	2.53144	0.34683	0.08176	0.05886	0.04534	46.5944
647190.61	4195779.7	647190.61_4195779.7	0.37959	33.11595	0.3829	0.09016	0.06995	0.04069	23.01591
647210.61	4195779.7	647210.61_4195779.7	0.38531	26.67629	0.37725	0.08928	0.06944	0.04055	24.55825
647230.61	4195779.7	647230.61_4195779.7	0.39071	21.36629	0.37249	0.08854	0.06888	0.04045	25.83172
647250.61	4195779.7	647250.61_4195779.7	0.39645	17.42465	0.36924	0.08776	0.06833	0.04043	27.05136
647270.61	4195779.7	647270.61_4195779.7	0.40218	14.4075	0.36692	0.08707	0.06777	0.04046	28.11087
647290.61	4195779.7	647290.61_4195779.7	0.4079	12.10176	0.36537	0.08639	0.06721	0.04054	29.03019
647310.61	4195779.7	647310.61_4195779.7	0.4133	10.30065	0.36416	0.0858	0.06662	0.04065	29.65418
647330.61	4195779.7	647330.61_4195779.7	0.41873	8.91696	0.36347	0.08521	0.06605	0.0408	30.28912
647350.61	4195779.7	647350.61_4195779.7	0.42399	7.8209	0.36304	0.08465	0.06547	0.04098	30.82415
647370.61	4195779.7	647370.61_4195779.7	0.4291	6.93864	0.3627	0.08414	0.0649	0.04117	31.28584
647390.61	4195779.7	647390.61_4195779.7	0.43411	6.21869	0.36241	0.08372	0.06434	0.04138	31.71878
647410.61	4195779.7	647410.61_4195779.7	0.43902	5.61991	0.36201	0.08328	0.06379	0.0416	32.06721
647430.61	4195779.7	647430.61_4195779.7	0.44392	5.1171	0.36147	0.08288	0.06325	0.04182	32.38224
647450.61	4195779.7	647450.61_4195779.7	0.44883	4.6889	0.36067	0.08248	0.06272	0.04206	32.63464
647470.61	4195779.7	647470.61_4195779.7	0.45372	4.32061	0.35954	0.08213	0.0622	0.0423	32.82659
647490.61	4195779.7	647490.61_4195779.7	0.45864	4.0008	0.35809	0.08182	0.0617	0.04256	32.95098
647510.61	4195779.7	647510.61_4195779.7	0.46353	3.72052	0.35625	0.08154	0.06122	0.04283	32.98332
647530.61	4195779.7	647530.61_4195779.7	0.46857	3.47374	0.35408	0.08127	0.06075	0.04312	32.94716
647550.61	4195779.7	647550.61_4195779.7	0.47393	3.25513	0.35162	0.08101	0.06031	0.04343	32.83018
647570.61	4195779.7	647570.61_4195779.7	0.47943	3.05689	0.34869	0.08087	0.05987	0.04374	32.30848
647590.61	4195779.7	647590.61_4195779.7	0.48547	2.87756	0.34545	0.0808	0.05944	0.04406	31.41324
647610.61	4195779.7	647610.61_4195779.7	0.49276	2.71812	0.34219	0.08069	0.05904	0.04438	30.37686
647630.61	4195779.7	647630.61_4195779.7	0.5014	2.57522	0.33893	0.0806	0.05867	0.04472	28.93009
647650.61	4195779.7	647650.61_4195779.7	0.51061	2.44256	0.33542	0.08061	0.0583	0.04502	26.20734
647190.61	4195799.7	647190.61_4195799.7	0.39046	34.00676	0.36697	0.08919	0.06924	0.04031	16.6099
647210.61	4195799.7	647210.61_4195799.7	0.39681	27.04432	0.36174	0.08825	0.06876	0.0402	17.55807
647230.61	4195799.7	647230.61_4195799.7	0.40224	20.97993	0.35675	0.08755	0.06819	0.0401	18.26953
647250.61	4195799.7	647250.61_4195799.7	0.40835	16.73412	0.35349	0.08676	0.06765	0.04009	19.04725
647270.61	4195799.7	647270.61_4195799.7	0.41447	13.62298	0.35115	0.08606	0.0671	0.04013	19.75767
647290.61	4195799.7	647290.61_4195799.7	0.42075	11.36528	0.3497	0.08537	0.06656	0.04022	20.45874
647310.61	4195799.7	647310.61_4195799.7	0.42619	9.59991	0.34826	0.08484	0.06596	0.04032	20.82129
647330.61	4195799.7	647330.61_4195799.7	0.43197	8.30047	0.34761	0.08427	0.06539	0.04048	21.27456
647350.61	4195799.7	647350.61_4195799.7	0.43756	7.28485	0.34723	0.08373	0.06482	0.04065	21.66271
647370.61	4195799.7	647370.61_4195799.7	0.44309	6.47905	0.3471	0.08321	0.06427	0.04085	22.04491
647390.61	4195799.7	647390.61_4195799.7	0.44842	5.8202	0.34699	0.08277	0.06371	0.04106	22.35878
647410.61	4195799.7	647410.61_4195799.7	0.4536	5.27217	0.3468	0.08233	0.06316	0.04128	22.59651

647430.61	4195799.7	647430.61_4195799.7	0.45872	4.8111	0.34648	0.08192	0.06263	0.0415	22.77799
647450.61	4195799.7	647450.61_4195799.7	0.46392	4.4197	0.346	0.08154	0.06211	0.04174	22.92959
647470.61	4195799.7	647470.61_4195799.7	0.46907	4.08148	0.3452	0.08118	0.06159	0.04198	22.99774
647490.61	4195799.7	647490.61_4195799.7	0.47427	3.78786	0.34412	0.08085	0.0611	0.04224	23.01228
647510.61	4195799.7	647510.61_4195799.7	0.47946	3.52951	0.34267	0.08056	0.06062	0.0425	22.9232
647530.61	4195799.7	647530.61_4195799.7	0.48497	3.30303	0.34096	0.08028	0.06016	0.0428	22.80659
647550.61	4195799.7	647550.61_4195799.7	0.49126	3.10522	0.33912	0.07998	0.05974	0.04312	22.73248
647570.61	4195799.7	647570.61_4195799.7	0.49736	2.92152	0.3366	0.07983	0.05931	0.04343	22.22577
647590.61	4195799.7	647590.61_4195799.7	0.50415	2.75547	0.33379	0.07973	0.05888	0.04374	21.47213
647610.61	4195799.7	647610.61_4195799.7	0.51218	2.60659	0.33085	0.07962	0.05848	0.04407	20.49052
647630.61	4195799.7	647630.61_4195799.7	0.52193	2.4746	0.32801	0.07946	0.05813	0.04441	19.27727
647650.61	4195799.7	647650.61_4195799.7	0.53186	2.35001	0.32473	0.07948	0.05776	0.04471	17.36473
647190.61	4195819.7	647190.61_4195819.7	0.40214	34.43351	0.35257	0.08821	0.06855	0.03996	12.889
647210.61	4195819.7	647210.61_4195819.7	0.40884	26.49676	0.34741	0.08726	0.06808	0.03985	13.53757
647230.61	4195819.7	647230.61_4195819.7	0.41459	19.85394	0.34249	0.08655	0.06752	0.03977	14.01369
647250.61	4195819.7	647250.61_4195819.7	0.4209	15.44398	0.33904	0.08576	0.06699	0.03976	14.50296
647270.61	4195819.7	647270.61_4195819.7	0.42744	12.45553	0.33666	0.08505	0.06645	0.03981	14.98814
647290.61	4195819.7	647290.61_4195819.7	0.43432	10.38819	0.33527	0.08434	0.06592	0.03991	15.50148
647310.61	4195819.7	647310.61_4195819.7	0.44015	8.78121	0.33382	0.08382	0.06533	0.04001	15.78333
647330.61	4195819.7	647330.61_4195819.7	0.44643	7.61955	0.33323	0.08326	0.06477	0.04017	16.13751
647350.61	4195819.7	647350.61_4195819.7	0.45247	6.71435	0.33295	0.08274	0.06422	0.04035	16.44649
647370.61	4195819.7	647370.61_4195819.7	0.45833	5.99165	0.33286	0.08221	0.06366	0.04055	16.71361
647390.61	4195819.7	647390.61_4195819.7	0.46391	5.40004	0.33282	0.08176	0.06311	0.04076	16.92307
647410.61	4195819.7	647410.61_4195819.7	0.46948	4.91138	0.33282	0.08133	0.06258	0.04098	17.10919
647430.61	4195819.7	647430.61_4195819.7	0.47491	4.49742	0.33271	0.08091	0.06205	0.0412	17.23098
647450.61	4195819.7	647450.61_4195819.7	0.48041	4.14475	0.33247	0.08053	0.06153	0.04144	17.31465
647470.61	4195819.7	647470.61_4195819.7	0.4859	3.83949	0.33199	0.08016	0.06102	0.04168	17.33578
647490.61	4195819.7	647490.61_4195819.7	0.49148	3.5734	0.33123	0.07984	0.06054	0.04194	17.3002
647510.61	4195819.7	647510.61_4195819.7	0.49711	3.33877	0.33016	0.07953	0.06006	0.04221	17.18422
647530.61	4195819.7	647530.61_4195819.7	0.50303	3.13144	0.32879	0.07926	0.05961	0.04249	17.00143
647550.61	4195819.7	647550.61_4195819.7	0.50988	2.95011	0.3273	0.07895	0.05919	0.04281	16.81604
647570.61	4195819.7	647570.61_4195819.7	0.51653	2.78083	0.32514	0.0788	0.05875	0.04312	16.32992
647590.61	4195819.7	647590.61_4195819.7	0.52408	2.6281	0.3227	0.07868	0.05833	0.04343	15.67247
647610.61	4195819.7	647610.61_4195819.7	0.53294	2.49075	0.3201	0.07857	0.05794	0.04375	14.83401
647630.61	4195819.7	647630.61_4195819.7	0.5437	2.36901	0.31757	0.07838	0.05759	0.04409	13.87921
647650.61	4195819.7	647650.61_4195819.7	0.55422	2.25241	0.3145	0.07842	0.05721	0.04438	12.59996
647190.61	4195839.7	647190.61_4195839.7	0.41447	33.09867	0.33929	0.08721	0.06788	0.03961	10.45859
647210.61	4195839.7	647210.61_4195839.7	0.42143	23.99315	0.33414	0.08627	0.06741	0.03951	10.91981
647230.61	4195839.7	647230.61_4195839.7	0.42769	17.49922	0.3294	0.08551	0.06687	0.03944	11.28187
647250.61	4195839.7	647250.61_4195839.7	0.4341	13.46431	0.32573	0.08479	0.06633	0.03943	11.60135
647270.61	4195839.7	647270.61_4195839.7	0.44117	10.93014	0.32333	0.08406	0.06581	0.03949	11.95305
647290.61	4195839.7	647290.61_4195839.7	0.44845	9.18527	0.32182	0.08337	0.06529	0.0396	12.3028
647310.61	4195839.7	647310.61_4195839.7	0.4552	7.86702	0.32063	0.08278	0.06473	0.03972	12.56862
647330.61	4195839.7	647330.61_4195839.7	0.46201	6.88069	0.32003	0.08221	0.06419	0.03988	12.82997
647350.61	4195839.7	647350.61_4195839.7	0.4685	6.10412	0.31975	0.08168	0.06364	0.04006	13.05187
647370.61	4195839.7	647370.61_4195839.7	0.47473	5.4796	0.31967	0.08115	0.06309	0.04026	13.23991
647390.61	4195839.7	647390.61_4195839.7	0.48075	4.96726	0.31974	0.08069	0.06255	0.04047	13.39497
647410.61	4195839.7	647410.61_4195839.7	0.4866	4.53899	0.31985	0.08029	0.06201	0.04069	13.5128
647430.61	4195839.7	647430.61_4195839.7	0.49239	4.17556	0.31989	0.07988	0.06149	0.04091	13.58984
647450.61	4195839.7	647450.61_4195839.7	0.4982	3.8634	0.31983	0.07951	0.06098	0.04115	13.62419
647470.61	4195839.7	647470.61_4195839.7	0.50404	3.59191	0.3196	0.07915	0.06048	0.04139	13.6074
647490.61	4195839.7	647490.61_4195839.7	0.50998	3.35396	0.3191	0.07882	0.05999	0.04165	13.53846
647510.61	4195839.7	647510.61_4195839.7	0.51607	3.14337	0.31834	0.07852	0.05952	0.04192	13.40636
647530.61	4195839.7	647530.61_4195839.7	0.52255	2.95658	0.31731	0.07824	0.05907	0.0422	13.21557
647550.61	4195839.7	647550.61_4195839.7	0.52978	2.79051	0.31605	0.07795	0.05865	0.0425	12.96306
647570.61	4195839.7	647570.61_4195839.7	0.53728	2.63755	0.3143	0.07776	0.05822	0.04281	12.54313
647590.61	4195839.7	647590.61_4195839.7	0.54575	2.49883	0.31224	0.07763	0.0578	0.04313	11.98741
647610.61	4195839.7	647610.61_4195839.7	0.55555	2.37327	0.30998	0.07753	0.05741	0.04345	11.30935
647630.61	4195839.7	647630.61_4195839.7	0.56706	2.2606	0.30767	0.07735	0.05706	0.04377	10.5776
647650.61	4195839.7	647650.61_4195839.7	0.57851	2.15343	0.30489	0.07737	0.05668	0.04407	9.73449
647190.61	4195859.7	647190.61_4195859.7	0.42745	26.77743	0.32698	0.08617	0.06722	0.03927	8.75016
647210.61	4195859.7	647210.61_4195859.7	0.43453	18.44576	0.32176	0.08528	0.06674	0.03917	9.07244
647230.61	4195859.7	647230.61_4195859.7	0.44166	13.9355	0.3174	0.08446	0.06625	0.03913	9.37563
647250.61	4195859.7	647250.61_4195859.7	0.44816	11.00897	0.31352	0.08381	0.0657	0.03912	9.59679
647270.61	4195859.7	647270.61_4195859.7	0.45557	9.16133	0.31098	0.0831	0.06517	0.03917	9.8456
647290.61	4195859.7	647290.61_4195859.7	0.46321	7.85051	0.30929	0.08245	0.06465	0.03928	10.0852
647310.61	4195859.7	647310.61_4195859.7	0.47086	6.86308	0.30825	0.0818	0.06413	0.03942	10.30508
647330.61	4195859.7	647330.61_4195859.7	0.47772	6.05999	0.30735	0.08128	0.06357	0.03957	10.44686
647350.61	4195859.7	647350.61_4195859.7	0.48464	5.43459	0.30702	0.08076	0.06302	0.03975	10.59258
647370.61	4195859.7	647370.61_4195859.7	0.49164	4.9338	0.30712	0.08021	0.06249	0.03996	10.74596
647390.61	4195859.7	647390.61_4195859.7	0.49807	4.50769	0.30724	0.07975	0.06196	0.04017	10.84661
647410.61	4195859.7	647410.61_4195859.7	0.50432	4.14762	0.30745	0.07936	0.06143	0.04039	10.92081
647430.61	4195859.7	647430.61_4195859.7	0.51051	3.83839	0.30763	0.07895	0.06092	0.04062	10.96146
647450.61	4195859.7	647450.61_4195859.7	0.51676	3.57087	0.30776	0.07856	0.06042	0.04085	10.97186
647470.61	4195859.7	647470.61_4195859.7	0.523	3.33525	0.30773	0.07819	0.05992	0.0411	10.9347
647490.61	4195859.7	647490.61_4195859.7	0.52943	3.12735	0.3075	0.07785	0.05944	0.04135	10.85568
647510.61	4195859.7	647510.61_4195859.7	0.53608	2.94217	0.30702	0.07754	0.05898	0.04162	10.72516
647530.61	4195859.7	647530.61_4195859.7	0.54317	2.77649	0.30629	0.07724	0.05853	0.0419	10.53648
647550.61	4195859.7	647550.61_4195859.7	0.55108	2.62806	0.30531	0.07697	0.05811	0.0422	10.28553
647570.61	4195859.7	647570.61_4195859.7	0.55943	2.49107	0.30391	0.0768	0.05769	0.04251	9.91526
647590.61	4195859.7	647590.61_4195859.7	0.56897	2.36662	0.30223	0.07664	0.05728	0.04283	9.45893

647610.61	4195859.7	647610.61_4195859.7	0.57988	2.25338	0.30031	0.07651	0.05689	0.04315	8.9384
647630.61	4195859.7	647630.61_4195859.7	0.59223	2.15025	0.29823	0.07635	0.05653	0.04346	8.39407
647650.61	4195859.7	647650.61_4195859.7	0.60456	2.05241	0.29572	0.07634	0.05616	0.04376	7.81441
647190.61	4195879.7	647190.61_4195879.7	0.44111	13.67565	0.31552	0.08514	0.06657	0.03893	7.48244
647210.61	4195879.7	647210.61_4195879.7	0.44834	11.67333	0.31028	0.08431	0.06609	0.03884	7.70728
647230.61	4195879.7	647230.61_4195879.7	0.45625	9.97466	0.30616	0.08346	0.06562	0.03881	7.95253
647250.61	4195879.7	647250.61_4195879.7	0.4631	8.46703	0.30227	0.08284	0.06507	0.03881	8.12194
647270.61	4195879.7	647270.61_4195879.7	0.47076	7.36277	0.29954	0.08217	0.06455	0.03886	8.29824
647290.61	4195879.7	647290.61_4195879.7	0.47884	6.51304	0.2977	0.08153	0.06403	0.03897	8.46933
647310.61	4195879.7	647310.61_4195879.7	0.48724	5.8425	0.29664	0.08086	0.06352	0.03912	8.63769
647330.61	4195879.7	647330.61_4195879.7	0.4944	5.24516	0.2956	0.08038	0.06296	0.03927	8.71847
647350.61	4195879.7	647350.61_4195879.7	0.50176	4.77019	0.29518	0.07988	0.06242	0.03945	8.80771
647370.61	4195879.7	647370.61_4195879.7	0.50924	4.38177	0.29525	0.07936	0.0619	0.03966	8.90568
647390.61	4195879.7	647390.61_4195879.7	0.51621	4.04448	0.29542	0.07889	0.06137	0.03987	8.96886
647410.61	4195879.7	647410.61_4195879.7	0.52283	3.75159	0.29567	0.07849	0.06085	0.04009	9.00352
647430.61	4195879.7	647430.61_4195879.7	0.52934	3.49547	0.29593	0.07809	0.06034	0.04031	9.00952
647450.61	4195879.7	647450.61_4195879.7	0.53602	3.27233	0.29619	0.07768	0.05984	0.04054	8.99821
647470.61	4195879.7	647470.61_4195879.7	0.5425	3.07096	0.29624	0.07735	0.05934	0.04078	8.93453
647490.61	4195879.7	647490.61_4195879.7	0.54957	2.89505	0.29629	0.077	0.05888	0.04104	8.85882
647510.61	4195879.7	647510.61_4195879.7	0.5568	2.73531	0.29605	0.07669	0.05842	0.04131	8.72714
647530.61	4195879.7	647530.61_4195879.7	0.56478	2.59267	0.29564	0.07637	0.05799	0.0416	8.55719
647550.61	4195879.7	647550.61_4195879.7	0.57386	2.46425	0.29504	0.07603	0.05758	0.0419	8.33955
647570.61	4195879.7	647570.61_4195879.7	0.58283	2.34177	0.29387	0.07589	0.05715	0.04221	8.0075
647590.61	4195879.7	647590.61_4195879.7	0.59329	2.23072	0.29247	0.07572	0.05674	0.04252	7.63331
647610.61	4195879.7	647610.61_4195879.7	0.60536	2.12979	0.29087	0.07557	0.05636	0.04284	7.23812
647630.61	4195879.7	647630.61_4195879.7	0.61937	2.03873	0.2892	0.07537	0.05602	0.04316	6.86036
647650.61	4195879.7	647650.61_4195879.7	0.63271	1.95056	0.287	0.07534	0.05565	0.04345	6.45084
647210.61	4195899.7	647210.61_4195899.7	0.46317	7.17673	0.2997	0.08337	0.06545	0.03852	6.66779
647230.61	4195899.7	647230.61_4195899.7	0.47141	6.81479	0.29557	0.08255	0.06499	0.0385	6.84719
647250.61	4195899.7	647250.61_4195899.7	0.47901	6.28576	0.29185	0.0819	0.06447	0.0385	6.98822
647270.61	4195899.7	647270.61_4195899.7	0.48686	5.75173	0.28893	0.08124	0.06394	0.03856	7.111
647290.61	4195899.7	647290.61_4195899.7	0.49553	5.2907	0.28701	0.0806	0.06343	0.03867	7.24236
647310.61	4195899.7	647310.61_4195899.7	0.50449	4.88032	0.28583	0.07996	0.06293	0.03883	7.36321
647330.61	4195899.7	647330.61_4195899.7	0.51264	4.49041	0.28487	0.07943	0.06239	0.03898	7.43453
647350.61	4195899.7	647350.61_4195899.7	0.52039	4.1475	0.28432	0.07897	0.06184	0.03916	7.48286
647370.61	4195899.7	647370.61_4195899.7	0.52828	3.85774	0.28426	0.07848	0.06132	0.03936	7.53562
647390.61	4195899.7	647390.61_4195899.7	0.53564	3.59859	0.2844	0.07799	0.0608	0.03957	7.56267
647410.61	4195899.7	647410.61_4195899.7	0.5427	3.36894	0.28466	0.07757	0.06028	0.03979	7.57078
647430.61	4195899.7	647430.61_4195899.7	0.54957	3.16297	0.28495	0.0772	0.05977	0.04001	7.55278
647450.61	4195899.7	647450.61_4195899.7	0.55688	2.98328	0.28537	0.07679	0.05929	0.04025	7.53194
647470.61	4195899.7	647470.61_4195899.7	0.56398	2.81755	0.2856	0.07646	0.0588	0.04049	7.46637
647490.61	4195899.7	647490.61_4195899.7	0.5714	2.66823	0.28574	0.07614	0.05833	0.04074	7.37127
647510.61	4195899.7	647510.61_4195899.7	0.57914	2.53186	0.28565	0.07584	0.05788	0.041	7.23362
647530.61	4195899.7	647530.61_4195899.7	0.58829	2.412	0.28558	0.07547	0.05746	0.0413	7.08452
647550.61	4195899.7	647550.61_4195899.7	0.59836	2.30123	0.28523	0.07512	0.05706	0.04161	6.88625
647570.61	4195899.7	647570.61_4195899.7	0.60843	2.19447	0.28434	0.07497	0.05663	0.04191	6.61099
647590.61	4195899.7	647590.61_4195899.7	0.62002	2.09679	0.28323	0.0748	0.05622	0.04222	6.31273
647610.61	4195899.7	647610.61_4195899.7	0.63345	2.00795	0.28196	0.07462	0.05585	0.04254	6.0137
647630.61	4195899.7	647630.61_4195899.7	0.64864	1.92693	0.28054	0.07443	0.05551	0.04286	5.7314
647650.61	4195899.7	647650.61_4195899.7	0.66291	1.84787	0.2786	0.07439	0.05514	0.04315	5.42963
647210.61	4195919.7	647210.61_4195919.7	0.47892	5.09149	0.28987	0.08248	0.06484	0.0382	5.84388
647230.61	4195919.7	647230.61_4195919.7	0.48732	4.93733	0.28565	0.08169	0.06436	0.03818	5.96882
647250.61	4195919.7	647250.61_4195919.7	0.49605	4.75891	0.28221	0.08095	0.06388	0.03821	6.0926
647270.61	4195919.7	647270.61_4195919.7	0.50401	4.50395	0.2791	0.08033	0.06334	0.03826	6.17498
647290.61	4195919.7	647290.61_4195919.7	0.51333	4.27771	0.2771	0.07967	0.06284	0.03838	6.27655
647310.61	4195919.7	647310.61_4195919.7	0.52267	4.04175	0.27571	0.07909	0.06233	0.03853	6.35812
647330.61	4195919.7	647330.61_4195919.7	0.53212	3.81434	0.27489	0.07849	0.06183	0.03871	6.42695
647350.61	4195919.7	647350.61_4195919.7	0.54044	3.58172	0.27423	0.07804	0.06129	0.03888	6.4541
647370.61	4195919.7	647370.61_4195919.7	0.54889	3.37663	0.2741	0.07754	0.06077	0.03909	6.48141
647390.61	4195919.7	647390.61_4195919.7	0.55694	3.18808	0.27422	0.07705	0.06026	0.0393	6.49354
647410.61	4195919.7	647410.61_4195919.7	0.56416	3.0093	0.27439	0.07666	0.05974	0.0395	6.47272
647430.61	4195919.7	647430.61_4195919.7	0.57165	2.85044	0.27475	0.07631	0.05924	0.03973	6.44617
647450.61	4195919.7	647450.61_4195919.7	0.57948	2.70774	0.27523	0.07591	0.05876	0.03997	6.40903
647470.61	4195919.7	647470.61_4195919.7	0.58776	2.57803	0.27572	0.0755	0.0583	0.04022	6.35384
647490.61	4195919.7	647490.61_4195919.7	0.59538	2.45163	0.27586	0.07522	0.05782	0.04046	6.24006
647510.61	4195919.7	647510.61_4195919.7	0.60361	2.3364	0.2759	0.07493	0.05736	0.04071	6.09891
647530.61	4195919.7	647530.61_4195919.7	0.61357	2.2349	0.27597	0.07458	0.05694	0.04101	5.95227
647550.61	4195919.7	647550.61_4195919.7	0.62482	2.14106	0.27585	0.07423	0.05654	0.04132	5.77834
647570.61	4195919.7	647570.61_4195919.7	0.63598	2.0488	0.27519	0.07408	0.05611	0.04162	5.54948
647590.61	4195919.7	647590.61_4195919.7	0.64891	1.96418	0.27436	0.07391	0.05572	0.04192	5.31367
647610.61	4195919.7	647610.61_4195919.7	0.66387	1.8872	0.27339	0.0737	0.05535	0.04225	5.08667
647630.61	4195919.7	647630.61_4195919.7	0.68036	1.81586	0.27223	0.07349	0.05501	0.04256	4.87157
647650.61	4195919.7	647650.61_4195919.7	0.69574	1.74608	0.27058	0.07344	0.05465	0.04285	4.64604
647210.61	4195939.7	647210.61_4195939.7	0.49549	3.98022	0.28062	0.0816	0.06422	0.03789	5.17086
647230.61	4195939.7	647230.61_4195939.7	0.50429	3.88012	0.27643	0.08082	0.06375	0.03787	5.26097
647250.61	4195939.7	647250.61_4195939.7	0.51396	3.78719	0.27315	0.08003	0.06329	0.03792	5.36209
647270.61	4195939.7	647270.61_4195939.7	0.5224	3.63692	0.27	0.07943	0.06276	0.03798	5.42205
647290.61	4195939.7	647290.61_4195939.7	0.53198	3.50363	0.2678	0.0788	0.06225	0.03809	5.48993
647310.61	4195939.7	647310.61_4195939.7	0.542	3.36899	0.26628	0.07823	0.06175	0.03824	5.55103
647330.61	4195939.7	647330.61_4195939.7	0.55263	3.23945	0.26549	0.07759	0.06127	0.03843	5.61048
647350.61	4195939.7	647350.61_4195939.7	0.56207	3.09247	0.26487	0.07708	0.06075	0.03862	5.63449

647370.61	4195939.7	647370.61_4195939.7	0.57131	2.95257	0.26467	0.07659	0.06024	0.03882	5.64885
647390.61	4195939.7	647390.61_4195939.7	0.57969	2.81426	0.26467	0.07616	0.05973	0.03902	5.6406
647410.61	4195939.7	647410.61_4195939.7	0.58734	2.68034	0.26477	0.07578	0.0592	0.03923	5.60832
647430.61	4195939.7	647430.61_4195939.7	0.59516	2.55806	0.2651	0.07544	0.0587	0.03944	5.56634
647450.61	4195939.7	647450.61_4195939.7	0.60362	2.44764	0.26561	0.07504	0.05823	0.03968	5.5179
647470.61	4195939.7	647470.61_4195939.7	0.61273	2.34619	0.2662	0.07461	0.05778	0.03994	5.45544
647490.61	4195939.7	647490.61_4195939.7	0.62104	2.24378	0.26645	0.07432	0.0573	0.04018	5.34292
647510.61	4195939.7	647510.61_4195939.7	0.63012	2.14917	0.26663	0.07406	0.05685	0.04043	5.20963
647530.61	4195939.7	647530.61_4195939.7	0.64109	2.06484	0.26684	0.07372	0.05643	0.04073	5.07321
647550.61	4195939.7	647550.61_4195939.7	0.65349	1.98583	0.26689	0.07338	0.05603	0.04103	4.91962
647570.61	4195939.7	647570.61_4195939.7	0.66597	1.90741	0.26646	0.07319	0.05561	0.04133	4.73165
647590.61	4195939.7	647590.61_4195939.7	0.68026	1.83471	0.26584	0.07302	0.05521	0.04163	4.54183
647610.61	4195939.7	647610.61_4195939.7	0.69684	1.7686	0.26514	0.07278	0.05486	0.04195	4.36531
647630.61	4195939.7	647630.61_4195939.7	0.71469	1.70657	0.26422	0.07257	0.05452	0.04226	4.19845
647650.61	4195939.7	647650.61_4195939.7	0.73148	1.64601	0.26288	0.07251	0.05417	0.04256	4.02851
647230.61	4195959.7	647230.61_4195959.7	0.52245	3.20292	0.26784	0.07992	0.06315	0.03757	4.68108
647250.61	4195959.7	647250.61_4195959.7	0.53267	3.14448	0.26454	0.07914	0.0627	0.03763	4.75492
647270.61	4195959.7	647270.61_4195959.7	0.54227	3.05039	0.26158	0.07851	0.0622	0.0377	4.80772
647290.61	4195959.7	647290.61_4195959.7	0.55198	2.94848	0.25915	0.07793	0.06168	0.03781	4.84839
647310.61	4195959.7	647310.61_4195959.7	0.56292	2.86176	0.25759	0.07734	0.06119	0.03796	4.89699
647330.61	4195959.7	647330.61_4195959.7	0.57417	2.77476	0.25662	0.07673	0.06071	0.03815	4.93705
647350.61	4195959.7	647350.61_4195959.7	0.58482	2.68038	0.25601	0.07619	0.06021	0.03834	4.95744
647370.61	4195959.7	647370.61_4195959.7	0.59422	2.57769	0.25558	0.07577	0.05969	0.03853	4.95156
647390.61	4195959.7	647390.61_4195959.7	0.60321	2.4787	0.25549	0.07536	0.05917	0.03874	4.93328
647410.61	4195959.7	647410.61_4195959.7	0.61182	2.38341	0.25564	0.07495	0.05867	0.03895	4.90102
647430.61	4195959.7	647430.61_4195959.7	0.62041	2.29273	0.25599	0.07458	0.05818	0.03917	4.85495
647450.61	4195959.7	647450.61_4195959.7	0.62948	2.20814	0.25651	0.07419	0.05771	0.0394	4.79786
647470.61	4195959.7	647470.61_4195959.7	0.63965	2.13086	0.25719	0.07374	0.05727	0.03967	4.73312
647490.61	4195959.7	647490.61_4195959.7	0.64849	2.04786	0.25746	0.07349	0.05679	0.0399	4.62083
647510.61	4195959.7	647510.61_4195959.7	0.6587	1.97194	0.25777	0.07322	0.05634	0.04015	4.50012
647530.61	4195959.7	647530.61_4195959.7	0.67092	1.90313	0.25812	0.07287	0.05593	0.04045	4.37761
647550.61	4195959.7	647550.61_4195959.7	0.68455	1.83722	0.2583	0.07253	0.05553	0.04075	4.24282
647570.61	4195959.7	647570.61_4195959.7	0.69858	1.77154	0.25808	0.07232	0.05512	0.04104	4.08807
647590.61	4195959.7	647590.61_4195959.7	0.7144	1.70978	0.25767	0.07216	0.05472	0.04134	3.93347
647610.61	4195959.7	647610.61_4195959.7	0.73262	1.65347	0.25718	0.07193	0.05437	0.04166	3.79281
647630.61	4195959.7	647630.61_4195959.7	0.75202	1.60026	0.25651	0.07169	0.05404	0.04197	3.66151
647650.61	4195959.7	647650.61_4195959.7	0.76957	1.54719	0.25537	0.07165	0.05368	0.04226	3.52474
647230.61	4195979.7	647230.61_4195979.7	0.54188	2.7162	0.2598	0.07902	0.06257	0.03728	4.19747
647250.61	4195979.7	647250.61_4195979.7	0.55229	2.67936	0.25639	0.07828	0.06211	0.03733	4.24562
647270.61	4195979.7	647270.61_4195979.7	0.56341	2.62878	0.25365	0.07761	0.06165	0.03743	4.29416
647290.61	4195979.7	647290.61_4195979.7	0.57354	2.54829	0.25113	0.07705	0.06112	0.03753	4.31881
647310.61	4195979.7	647310.61_4195979.7	0.58504	2.47923	0.24941	0.07648	0.06063	0.03768	4.35069
647330.61	4195979.7	647330.61_4195979.7	0.59686	2.41117	0.24826	0.07592	0.06014	0.03786	4.375
647350.61	4195979.7	647350.61_4195979.7	0.60883	2.3457	0.24764	0.07535	0.05966	0.03807	4.39177
647370.61	4195979.7	647370.61_4195979.7	0.61892	2.26906	0.24709	0.07495	0.05915	0.03826	4.37863
647390.61	4195979.7	647390.61_4195979.7	0.62873	2.19627	0.24694	0.07453	0.05864	0.03846	4.3553
647410.61	4195979.7	647410.61_4195979.7	0.63827	2.12644	0.24707	0.0741	0.05815	0.03867	4.32043
647430.61	4195979.7	647430.61_4195979.7	0.64768	2.05843	0.24741	0.0737	0.05766	0.03889	4.27098
647450.61	4195979.7	647450.61_4195979.7	0.65742	1.99342	0.24791	0.07334	0.0572	0.03913	4.20912
647470.61	4195979.7	647470.61_4195979.7	0.66858	1.93407	0.24861	0.0729	0.05677	0.03939	4.14217
647490.61	4195979.7	647490.61_4195979.7	0.67831	1.86815	0.24894	0.07264	0.05629	0.03962	4.03779
647510.61	4195979.7	647510.61_4195979.7	0.68964	1.80718	0.24935	0.07236	0.05585	0.03988	3.9282
647530.61	4195979.7	647530.61_4195979.7	0.70302	1.75077	0.24976	0.07204	0.05543	0.04016	3.81718
647550.61	4195979.7	647550.61_4195979.7	0.71757	1.69526	0.24996	0.07175	0.05502	0.04045	3.69574
647570.61	4195979.7	647570.61_4195979.7	0.73369	1.64166	0.24997	0.07151	0.05462	0.04075	3.57004
647590.61	4195979.7	647590.61_4195979.7	0.75168	1.59073	0.24981	0.07132	0.05424	0.04106	3.44645
647610.61	4195979.7	647610.61_4195979.7	0.77162	1.54318	0.24953	0.07109	0.05389	0.04138	3.33206
647630.61	4195979.7	647630.61_4195979.7	0.79247	1.49778	0.24905	0.07084	0.05356	0.04169	3.22539
647650.61	4195979.7	647650.61_4195979.7	0.81093	1.4518	0.24812	0.07079	0.0532	0.04197	3.11407
647230.61	4195999.7	647230.61_4195999.7	0.5623	2.34241	0.25216	0.07817	0.06199	0.03699	3.78509
647250.61	4195999.7	647250.61_4195999.7	0.57344	2.32396	0.2488	0.07744	0.06154	0.03705	3.81992
647270.61	4195999.7	647270.61_4195999.7	0.58568	2.30076	0.24614	0.07674	0.06109	0.03715	3.85816
647290.61	4195999.7	647290.61_4195999.7	0.59654	2.24353	0.24358	0.07619	0.06057	0.03726	3.87322
647310.61	4195999.7	647310.61_4195999.7	0.60863	2.18705	0.24173	0.07564	0.06008	0.03741	3.89125
647330.61	4195999.7	647330.61_4195999.7	0.62137	2.13201	0.24048	0.07511	0.0596	0.03759	3.90628
647350.61	4195999.7	647350.61_4195999.7	0.63475	2.08196	0.23981	0.07452	0.05914	0.0378	3.91856
647370.61	4195999.7	647370.61_4195999.7	0.64558	2.01956	0.23916	0.07413	0.05862	0.03799	3.89936
647390.61	4195999.7	647390.61_4195999.7	0.65629	1.96229	0.23892	0.07371	0.05812	0.03819	3.87202
647410.61	4195999.7	647410.61_4195999.7	0.66684	1.90852	0.23903	0.07327	0.05764	0.03841	3.83515
647430.61	4195999.7	647430.61_4195999.7	0.67729	1.85631	0.23935	0.07286	0.05716	0.03863	3.7855
647450.61	4195999.7	647450.61_4195999.7	0.68791	1.80542	0.23983	0.0725	0.0567	0.03886	3.72316
647470.61	4195999.7	647470.61_4195999.7	0.6999	1.75812	0.24049	0.07209	0.05627	0.03912	3.65474
647490.61	4195999.7	647490.61_4195999.7	0.71031	1.7044	0.24081	0.07184	0.05579	0.03934	3.55676
647510.61	4195999.7	647510.61_4195999.7	0.72298	1.65554	0.24126	0.07156	0.05535	0.0396	3.45921
647530.61	4195999.7	647530.61_4195999.7	0.73778	1.60968	0.24173	0.07125	0.05494	0.03988	3.361
647550.61	4195999.7	647550.61_4195999.7	0.75412	1.56446	0.24206	0.07098	0.05453	0.04017	3.25734
647570.61	4195999.7	647570.61_4195999.7	0.7724	1.52068	0.24225	0.07072	0.05414	0.04047	3.15281
647590.61	4195999.7	647590.61_4195999.7	0.79249	1.47855	0.24227	0.07048	0.05377	0.04078	3.05077
647610.61	4195999.7	647610.61_4195999.7	0.81422	1.43856	0.24215	0.07025	0.05341	0.0411	2.95572
647630.61	4195999.7	647630.61_4195999.7	0.83657	1.40014	0.24185	0.07	0.05308	0.0414	2.86755
647650.61	4195999.7	647650.61_4195999.7	0.85605	1.3607	0.24114	0.06995	0.05273	0.04169	2.77558

647250.61	4196019.7	647250.61_4196019.7	0.59625	2.04165	0.24171	0.07661	0.06098	0.03677	3.45979
647270.61	4196019.7	647270.61_4196019.7	0.60919	2.03252	0.239	0.07591	0.06054	0.03688	3.48525
647290.61	4196019.7	647290.61_4196019.7	0.62173	2.00244	0.23661	0.07532	0.06005	0.037	3.49926
647310.61	4196019.7	647310.61_4196019.7	0.63458	1.95981	0.23466	0.07478	0.05956	0.03715	3.50724
647330.61	4196019.7	647330.61_4196019.7	0.6483	1.91494	0.23329	0.07427	0.05908	0.03733	3.5133
647350.61	4196019.7	647350.61_4196019.7	0.66244	1.87067	0.23245	0.0737	0.05861	0.03754	3.51435
647370.61	4196019.7	647370.61_4196019.7	0.67473	1.82018	0.23178	0.07329	0.05811	0.03773	3.49512
647390.61	4196019.7	647390.61_4196019.7	0.68652	1.77235	0.23149	0.07286	0.05762	0.03793	3.46566
647410.61	4196019.7	647410.61_4196019.7	0.69817	1.72798	0.23152	0.07244	0.05715	0.03815	3.42737
647430.61	4196019.7	647430.61_4196019.7	0.70933	1.6841	0.23174	0.07205	0.05667	0.03837	3.37557
647450.61	4196019.7	647450.61_4196019.7	0.72082	1.64207	0.23215	0.07169	0.05621	0.0386	3.31406
647470.61	4196019.7	647470.61_4196019.7	0.73382	1.60322	0.23277	0.07129	0.05578	0.03885	3.24813
647490.61	4196019.7	647490.61_4196019.7	0.74583	1.56033	0.23317	0.07103	0.05531	0.03908	3.16303
647510.61	4196019.7	647510.61_4196019.7	0.76023	1.521	0.23368	0.07072	0.05488	0.03934	3.07838
647530.61	4196019.7	647530.61_4196019.7	0.77666	1.48303	0.23419	0.07045	0.05447	0.03962	2.9913
647550.61	4196019.7	647550.61_4196019.7	0.79498	1.44573	0.2346	0.07017	0.05406	0.0399	2.90174
647570.61	4196019.7	647570.61_4196019.7	0.81542	1.40954	0.23489	0.06989	0.05368	0.0402	2.8128
647590.61	4196019.7	647590.61_4196019.7	0.83757	1.37431	0.23504	0.06963	0.0533	0.04051	2.72613
647610.61	4196019.7	647610.61_4196019.7	0.86091	1.3404	0.23505	0.06944	0.05295	0.04082	2.6449
647630.61	4196019.7	647630.61_4196019.7	0.88471	1.30793	0.2349	0.0692	0.05262	0.04112	2.57034
647650.61	4196019.7	647650.61_4196019.7	0.90522	1.2743	0.23439	0.06912	0.05227	0.0414	2.49314
647250.61	4196039.7	647250.61_4196039.7	0.62061	1.81243	0.23499	0.07579	0.06043	0.0365	3.14963
647270.61	4196039.7	647270.61_4196039.7	0.63394	1.80728	0.23219	0.07514	0.05998	0.0366	3.16262
647290.61	4196039.7	647290.61_4196039.7	0.64827	1.79686	0.22993	0.07449	0.05952	0.03674	3.17413
647310.61	4196039.7	647310.61_4196039.7	0.6624	1.77047	0.22798	0.07394	0.05904	0.0369	3.17645
647330.61	4196039.7	647330.61_4196039.7	0.67719	1.73617	0.22653	0.07344	0.05857	0.03707	3.17445
647350.61	4196039.7	647350.61_4196039.7	0.69221	1.69836	0.22553	0.07291	0.05809	0.03727	3.16668
647370.61	4196039.7	647370.61_4196039.7	0.70591	1.65613	0.2248	0.07247	0.05761	0.03747	3.14545
647390.61	4196039.7	647390.61_4196039.7	0.71916	1.61562	0.22446	0.07204	0.05713	0.03768	3.11585
647410.61	4196039.7	647410.61_4196039.7	0.73177	1.57645	0.22439	0.07164	0.05665	0.03789	3.07599
647430.61	4196039.7	647430.61_4196039.7	0.74407	1.53868	0.22455	0.07123	0.05619	0.03811	3.02625
647450.61	4196039.7	647450.61_4196039.7	0.75663	1.50243	0.2249	0.07087	0.05573	0.03834	2.96815
647470.61	4196039.7	647470.61_4196039.7	0.76997	1.46742	0.22537	0.07054	0.05528	0.03858	2.90297
647490.61	4196039.7	647490.61_4196039.7	0.78469	1.43379	0.22591	0.07021	0.05485	0.03882	2.83302
647510.61	4196039.7	647510.61_4196039.7	0.80109	1.40109	0.22646	0.06989	0.05442	0.03908	2.75926
647530.61	4196039.7	647530.61_4196039.7	0.81957	1.36929	0.227	0.06962	0.05401	0.03936	2.6833
647550.61	4196039.7	647550.61_4196039.7	0.84032	1.33828	0.22748	0.06933	0.05361	0.03964	2.6064
647570.61	4196039.7	647570.61_4196039.7	0.86311	1.30793	0.22786	0.06906	0.05323	0.03994	2.52987
647590.61	4196039.7	647590.61_4196039.7	0.8875	1.27833	0.22812	0.06882	0.05285	0.04024	2.45589
647610.61	4196039.7	647610.61_4196039.7	0.91271	1.24961	0.22825	0.06862	0.0525	0.04055	2.38631
647630.61	4196039.7	647630.61_4196039.7	0.93724	1.22145	0.22819	0.06844	0.05216	0.04084	2.3205
647650.61	4196039.7	647650.61_4196039.7	0.95876	1.19288	0.22784	0.06832	0.05181	0.04112	2.25474
647270.61	4196059.7	647270.61_4196059.7	0.66088	1.62096	0.22584	0.07434	0.05944	0.03633	2.88564
647290.61	4196059.7	647290.61_4196059.7	0.67545	1.61529	0.22343	0.07378	0.05897	0.03646	2.88551
647310.61	4196059.7	647310.61_4196059.7	0.69087	1.60183	0.22148	0.0732	0.0585	0.03662	2.88183
647330.61	4196059.7	647330.61_4196059.7	0.70693	1.57912	0.21996	0.07268	0.05803	0.0368	2.87372
647350.61	4196059.7	647350.61_4196059.7	0.72402	1.55262	0.21897	0.07213	0.05758	0.03701	2.86407
647370.61	4196059.7	647370.61_4196059.7	0.73851	1.51599	0.21809	0.07173	0.05708	0.03719	2.83745
647390.61	4196059.7	647390.61_4196059.7	0.75287	1.48055	0.21764	0.07133	0.05661	0.0374	2.80581
647410.61	4196059.7	647410.61_4196059.7	0.76685	1.44647	0.21752	0.0709	0.05614	0.03762	2.76759
647430.61	4196059.7	647430.61_4196059.7	0.78032	1.41289	0.21759	0.07052	0.05568	0.03783	2.72061
647450.61	4196059.7	647450.61_4196059.7	0.79415	1.38083	0.21788	0.07015	0.05523	0.03806	2.66737
647470.61	4196059.7	647470.61_4196059.7	0.80902	1.35021	0.21832	0.06981	0.05478	0.0383	2.60915
647490.61	4196059.7	647490.61_4196059.7	0.82546	1.32088	0.21884	0.0695	0.05435	0.03854	2.54717
647510.61	4196059.7	647510.61_4196059.7	0.84419	1.29303	0.21943	0.06917	0.05394	0.0388	2.48353
647530.61	4196059.7	647530.61_4196059.7	0.86475	1.26541	0.21995	0.06891	0.05352	0.03907	2.41652
647550.61	4196059.7	647550.61_4196059.7	0.8882	1.23919	0.2205	0.06863	0.05313	0.03936	2.35051
647570.61	4196059.7	647570.61_4196059.7	0.91345	1.2133	0.22094	0.06838	0.05274	0.03965	2.28441
647590.61	4196059.7	647590.61_4196059.7	0.94047	1.18845	0.22131	0.06812	0.05238	0.03996	2.22184
647610.61	4196059.7	647610.61_4196059.7	0.96761	1.16407	0.22153	0.06791	0.05203	0.04026	2.16227
647630.61	4196059.7	647630.61_4196059.7	0.99361	1.1402	0.22161	0.06773	0.05169	0.04055	2.10589
647650.61	4196059.7	647650.61_4196059.7	1.01722	1.11677	0.22149	0.06755	0.05136	0.04084	2.05172
647230.61	4196159.7	647230.61_4196159.7	0.77795	1.07099	0.20367	0.07197	0.05764	0.03481	1.92702
647250.61	4196159.7	647250.61_4196159.7	0.80965	1.05963	0.20149	0.0711	0.05734	0.03496	1.93502
647270.61	4196159.7	647270.61_4196159.7	0.83236	1.04532	0.19884	0.07048	0.05691	0.03508	1.92135
647290.61	4196159.7	647290.61_4196159.7	0.85525	1.04011	0.1965	0.06991	0.05648	0.03523	1.90398
647230.61	4196179.7	647230.61_4196179.7	0.81597	1.00351	0.19904	0.07121	0.05715	0.03457	1.79801
647250.61	4196179.7	647250.61_4196179.7	0.8488	0.98809	0.19671	0.07041	0.05683	0.03471	1.79815
647270.61	4196179.7	647270.61_4196179.7	0.87451	0.9729	0.19412	0.0698	0.05642	0.03483	1.7831
647290.61	4196179.7	647290.61_4196179.7	0.90075	0.96657	0.19186	0.0692	0.056	0.03499	1.76554
647230.61	4196199.7	647230.61_4196199.7	0.85686	0.94386	0.19464	0.07043	0.05669	0.03434	1.68093
647250.61	4196199.7	647250.61_4196199.7	0.89049	0.92483	0.19213	0.06971	0.05633	0.03446	1.67393
647270.61	4196199.7	647270.61_4196199.7	0.91952	0.90901	0.18957	0.06913	0.05592	0.03459	1.65778
647290.61	4196199.7	647290.61_4196199.7	0.95071	0.90249	0.18745	0.06847	0.05553	0.03475	1.64139
647230.61	4196219.7	647230.61_4196219.7	0.89621	0.8861	0.19012	0.06977	0.05618	0.03409	1.56779
647250.61	4196219.7	647250.61_4196219.7	0.93334	0.86733	0.18763	0.06908	0.05582	0.03421	1.55923
647270.61	4196219.7	647270.61_4196219.7	0.96623	0.85136	0.18514	0.0685	0.05541	0.03433	1.54262
647290.61	4196219.7	647290.61_4196219.7	1.00456	0.84561	0.18319	0.06776	0.05506	0.03452	1.52881
647230.61	4196239.7	647230.61_4196239.7	0.94555	0.83957	0.18618	0.06898	0.05574	0.03387	1.47215
647250.61	4196239.7	647250.61_4196239.7	0.98414	0.81927	0.1836	0.06834	0.05537	0.03398	1.45961
647270.61	4196239.7	647270.61_4196239.7	1.02233	0.80363	0.18117	0.06775	0.05497	0.03411	1.44345

647290.61	4196239.7	647290.61_4196239.7	1.06338	0.79514	0.17912	0.06708	0.0546	0.03429	1.42724
647230.61	4196259.7	647230.61_4196259.7	0.99454	0.7941	0.18214	0.06831	0.05527	0.03364	1.37994
647250.61	4196259.7	647250.61_4196259.7	1.03921	0.77576	0.17971	0.06761	0.05492	0.03376	1.36852
647270.61	4196259.7	647270.61_4196259.7	1.08232	0.7601	0.17732	0.06705	0.05453	0.03389	1.35239
647290.61	4196259.7	647290.61_4196259.7	1.12758	0.75007	0.17522	0.06644	0.05414	0.03406	1.33531
647230.61	4196279.7	647230.61_4196279.7	1.04367	0.75053	0.17805	0.06773	0.05477	0.03338	1.29241
647250.61	4196279.7	647250.61_4196279.7	1.09836	0.73575	0.17593	0.06694	0.05447	0.03354	1.28464
647270.61	4196279.7	647270.61_4196279.7	1.14654	0.72031	0.17357	0.0664	0.05408	0.03367	1.2688
647290.61	4196279.7	647290.61_4196279.7	1.19731	0.70945	0.17147	0.06583	0.05369	0.03383	1.25176
647270.61	4196299.7	647270.61_4196299.7	1.2138	0.6832	0.16987	0.06581	0.05361	0.03343	1.19131
647290.61	4196299.7	647290.61_4196299.7	1.27079	0.67197	0.16777	0.06527	0.05322	0.03359	1.17476
647310.61	4196299.7	647310.61_4196299.7	1.33005	0.66469	0.16589	0.06473	0.05282	0.03376	1.15735
647330.61	4196299.7	647330.61_4196299.7	1.39146	0.66114	0.16423	0.06423	0.05242	0.03394	1.13954
647350.61	4196299.7	647350.61_4196299.7	1.45537	0.66059	0.16276	0.06378	0.05201	0.03413	1.12126
647370.61	4196299.7	647370.61_4196299.7	1.52333	0.66228	0.16151	0.06337	0.0516	0.03433	1.10291
647390.61	4196299.7	647390.61_4196299.7	1.59412	0.66532	0.16046	0.06297	0.0512	0.03453	1.08477
647410.61	4196299.7	647410.61_4196299.7	1.66558	0.66863	0.15962	0.0626	0.05079	0.03473	1.06696
647430.61	4196299.7	647430.61_4196299.7	1.73897	0.67114	0.15896	0.06227	0.05039	0.03494	1.04952
647450.61	4196299.7	647450.61_4196299.7	1.82843	0.67298	0.15857	0.06186	0.05002	0.03517	1.03393
647470.61	4196299.7	647470.61_4196299.7	1.91652	0.67114	0.15817	0.0616	0.0496	0.03538	1.0166
647490.61	4196299.7	647490.61_4196299.7	2.02543	0.66807	0.15803	0.06132	0.04922	0.03562	1.00137
647510.61	4196299.7	647510.61_4196299.7	2.13869	0.66275	0.15802	0.06103	0.04883	0.03586	0.98674
647530.61	4196299.7	647530.61_4196299.7	2.25109	0.65582	0.15817	0.06077	0.04847	0.03612	0.97309
647550.61	4196299.7	647550.61_4196299.7	2.3526	0.64745	0.15842	0.06052	0.04811	0.03639	0.9599
647570.61	4196299.7	647570.61_4196299.7	2.43788	0.6381	0.15877	0.06027	0.04776	0.03667	0.94704
647590.61	4196299.7	647590.61_4196299.7	2.50371	0.62817	0.15919	0.06004	0.04743	0.03695	0.93431
647610.61	4196299.7	647610.61_4196299.7	2.54936	0.61801	0.15967	0.05981	0.0471	0.03723	0.92143
647630.61	4196299.7	647630.61_4196299.7	2.57621	0.60786	0.16019	0.0596	0.04679	0.0375	0.90819
647650.61	4196299.7	647650.61_4196299.7	2.58675	0.59788	0.16073	0.05939	0.04649	0.03776	0.89454
647270.61	4196319.7	647270.61_4196319.7	1.29117	0.65021	0.1664	0.06517	0.05317	0.03321	1.12182
647290.61	4196319.7	647290.61_4196319.7	1.3586	0.63963	0.1644	0.06458	0.0528	0.03338	1.10702
647310.61	4196319.7	647310.61_4196319.7	1.42861	0.63201	0.16255	0.06403	0.05241	0.03355	1.09079
647330.61	4196319.7	647330.61_4196319.7	1.50166	0.62771	0.16091	0.06354	0.05202	0.03374	1.07405
647350.61	4196319.7	647350.61_4196319.7	1.57741	0.62625	0.15945	0.06311	0.05161	0.03393	1.05685
647370.61	4196319.7	647370.61_4196319.7	1.65856	0.62715	0.15818	0.0627	0.05121	0.03412	1.03963
647390.61	4196319.7	647390.61_4196319.7	1.74382	0.62962	0.15712	0.06232	0.05081	0.03432	1.02244
647410.61	4196319.7	647410.61_4196319.7	1.83129	0.63282	0.15624	0.06193	0.05041	0.03452	1.00554
647430.61	4196319.7	647430.61_4196319.7	1.92294	0.63577	0.15554	0.06158	0.05001	0.03473	0.98908
647450.61	4196319.7	647450.61_4196319.7	2.02942	0.638	0.15504	0.06124	0.04963	0.03495	0.97358
647470.61	4196319.7	647470.61_4196319.7	2.14794	0.63821	0.15467	0.06093	0.04923	0.03517	0.95831
647490.61	4196319.7	647490.61_4196319.7	2.2827	0.63676	0.15448	0.06066	0.04885	0.03541	0.94421
647510.61	4196319.7	647510.61_4196319.7	2.42017	0.63328	0.15442	0.06038	0.04847	0.03565	0.93095
647530.61	4196319.7	647530.61_4196319.7	2.55075	0.62804	0.15451	0.0601	0.04811	0.03591	0.9186
647550.61	4196319.7	647550.61_4196319.7	2.66438	0.62125	0.15472	0.05984	0.04776	0.03618	0.90686
647570.61	4196319.7	647570.61_4196319.7	2.75356	0.61321	0.15501	0.0596	0.04741	0.03646	0.89534
647590.61	4196319.7	647590.61_4196319.7	2.81765	0.60442	0.1554	0.05938	0.04707	0.03674	0.884
647610.61	4196319.7	647610.61_4196319.7	2.8562	0.59517	0.15584	0.05918	0.04675	0.03701	0.87249
647630.61	4196319.7	647630.61_4196319.7	2.87263	0.58577	0.15635	0.05894	0.04644	0.03729	0.86067
647650.61	4196319.7	647650.61_4196319.7	2.86509	0.576	0.15681	0.05878	0.04613	0.03753	0.84785
647270.61	4196339.7	647270.61_4196339.7	1.3718	0.61872	0.16289	0.0646	0.0527	0.03297	1.05643
647290.61	4196339.7	647290.61_4196339.7	1.4538	0.60954	0.16109	0.06395	0.05237	0.03316	1.04437
647310.61	4196339.7	647310.61_4196339.7	1.5344	0.6015	0.15925	0.06341	0.05198	0.03333	1.02897
647330.61	4196339.7	647330.61_4196339.7	1.61948	0.59637	0.15759	0.06297	0.05158	0.03351	1.01289
647350.61	4196339.7	647350.61_4196339.7	1.70998	0.59412	0.15614	0.06256	0.05119	0.0337	0.99674
647370.61	4196339.7	647370.61_4196339.7	1.81168	0.59475	0.15494	0.0621	0.05081	0.03391	0.98123
647390.61	4196339.7	647390.61_4196339.7	1.90856	0.59588	0.15377	0.06176	0.05038	0.03409	0.96398
647410.61	4196339.7	647410.61_4196339.7	2.01912	0.59903	0.15289	0.06135	0.04999	0.03429	0.94837
647430.61	4196339.7	647430.61_4196339.7	2.13481	0.60213	0.15216	0.06101	0.0496	0.0345	0.93287
647450.61	4196339.7	647450.61_4196339.7	2.26697	0.60469	0.1516	0.06069	0.04921	0.03472	0.91799
647470.61	4196339.7	647470.61_4196339.7	2.42225	0.60622	0.15121	0.06039	0.04883	0.03494	0.90404
647490.61	4196339.7	647490.61_4196339.7	2.59045	0.60612	0.15097	0.06009	0.04845	0.03518	0.89099
647510.61	4196339.7	647510.61_4196339.7	2.7575	0.60428	0.15088	0.05981	0.04808	0.03542	0.87893
647530.61	4196339.7	647530.61_4196339.7	2.90999	0.6007	0.15092	0.05951	0.04773	0.03568	0.8678
647550.61	4196339.7	647550.61_4196339.7	3.04229	0.59581	0.15113	0.05922	0.04739	0.03596	0.85767
647570.61	4196339.7	647570.61_4196339.7	3.12473	0.58881	0.15132	0.05903	0.04703	0.03622	0.84689
647590.61	4196339.7	647590.61_4196339.7	3.1808	0.58119	0.15166	0.05881	0.04669	0.0365	0.83673
647610.61	4196339.7	647610.61_4196339.7	3.20649	0.57299	0.15208	0.05862	0.04638	0.03678	0.82651
647630.61	4196339.7	647630.61_4196339.7	3.21107	0.56471	0.15261	0.05833	0.04609	0.03706	0.81631
647650.61	4196339.7	647650.61_4196339.7	3.1804	0.55545	0.15303	0.05818	0.04577	0.0373	0.80456
647290.61	4196359.7	647290.61_4196359.7	1.55518	0.581	0.15779	0.0634	0.05191	0.03293	0.98575
647310.61	4196359.7	647310.61_4196359.7	1.64901	0.57311	0.15601	0.06287	0.05154	0.0331	0.9717
647330.61	4196359.7	647330.61_4196359.7	1.75279	0.56785	0.15441	0.06241	0.05116	0.03329	0.95707
647350.61	4196359.7	647350.61_4196359.7	1.86285	0.56498	0.15297	0.06199	0.05077	0.03348	0.94194
647370.61	4196359.7	647370.61_4196359.7	1.98854	0.56503	0.15178	0.0615	0.0504	0.03369	0.92758
647390.61	4196359.7	647390.61_4196359.7	2.10625	0.56534	0.15058	0.06119	0.04997	0.03386	0.91102
647410.61	4196359.7	647410.61_4196359.7	2.2439	0.56791	0.14967	0.0608	0.04958	0.03406	0.89611
647430.61	4196359.7	647430.61_4196359.7	2.39412	0.57098	0.14893	0.06044	0.0492	0.03427	0.8816
647450.61	4196359.7	647450.61_4196359.7	2.56696	0.57379	0.14832	0.06015	0.04881	0.03448	0.8675
647470.61	4196359.7	647470.61_4196359.7	2.76775	0.57598	0.14789	0.05985	0.04843	0.03471	0.85439
647490.61	4196359.7	647490.61_4196359.7	2.98156	0.577	0.14762	0.05953	0.04806	0.03494	0.84236
647510.61	4196359.7	647510.61_4196359.7	3.18406	0.57649	0.14748	0.05926	0.04769	0.03519	0.83127

647530.61	4196359.7	647530.61_4196359.7	3.3602	0.57442	0.14748	0.05897	0.04734	0.03545	0.82115
647550.61	4196359.7	647550.61_4196359.7	3.50525	0.57114	0.14766	0.05866	0.04702	0.03573	0.8122
647570.61	4196359.7	647570.61_4196359.7	3.575	0.56537	0.14779	0.05849	0.04665	0.03599	0.80225
647590.61	4196359.7	647590.61_4196359.7	3.61289	0.55898	0.14808	0.05827	0.04632	0.03626	0.7931
647610.61	4196359.7	647610.61_4196359.7	3.6173	0.55198	0.14848	0.05805	0.04601	0.03655	0.78412
647630.61	4196359.7	647630.61_4196359.7	3.59643	0.54462	0.14898	0.05776	0.04573	0.03683	0.77504
647650.61	4196359.7	647650.61_4196359.7	3.53651	0.53612	0.1494	0.05761	0.04541	0.03707	0.76448
647330.61	4196379.7	647330.61_4196379.7	1.90669	0.54198	0.15138	0.06184	0.05075	0.03307	0.90628
647350.61	4196379.7	647350.61_4196379.7	2.04239	0.53867	0.14995	0.06139	0.05036	0.03326	0.89212
647370.61	4196379.7	647370.61_4196379.7	2.19781	0.53793	0.14875	0.06091	0.04999	0.03347	0.87849
647390.61	4196379.7	647390.61_4196379.7	2.34938	0.53785	0.14756	0.06059	0.04958	0.03365	0.86304
647410.61	4196379.7	647410.61_4196379.7	2.52295	0.53956	0.1466	0.06023	0.04918	0.03384	0.84857
647430.61	4196379.7	647430.61_4196379.7	2.72394	0.54238	0.14584	0.05989	0.0488	0.03405	0.83491
647450.61	4196379.7	647450.61_4196379.7	2.96003	0.54527	0.14522	0.05958	0.04842	0.03426	0.82171
647470.61	4196379.7	647470.61_4196379.7	3.2304	0.54794	0.14475	0.05928	0.04804	0.03448	0.80952
647490.61	4196379.7	647490.61_4196379.7	3.50226	0.5497	0.14443	0.05896	0.04768	0.03472	0.79824
647510.61	4196379.7	647510.61_4196379.7	3.74648	0.55026	0.14425	0.05871	0.04732	0.03497	0.78796
647530.61	4196379.7	647530.61_4196379.7	3.9404	0.54939	0.1442	0.05842	0.04697	0.03523	0.77858
647550.61	4196379.7	647550.61_4196379.7	4.08298	0.5474	0.14433	0.05812	0.04665	0.03551	0.77038
647570.61	4196379.7	647570.61_4196379.7	4.12762	0.54302	0.14443	0.05794	0.04629	0.03576	0.76134
647590.61	4196379.7	647590.61_4196379.7	4.13175	0.53791	0.14468	0.0577	0.04596	0.03604	0.75313
647610.61	4196379.7	647610.61_4196379.7	4.09566	0.53195	0.14504	0.05748	0.04565	0.03632	0.74498
647630.61	4196379.7	647630.61_4196379.7	4.03466	0.52549	0.1455	0.05722	0.04537	0.0366	0.73679
647650.61	4196379.7	647650.61_4196379.7	3.93412	0.5178	0.1459	0.05706	0.04505	0.03684	0.72725
647350.61	4196399.7	647350.61_4196399.7	2.25086	0.5145	0.14703	0.06081	0.04996	0.03305	0.84624
647370.61	4196399.7	647370.61_4196399.7	2.44636	0.51307	0.14582	0.06035	0.04959	0.03325	0.83327
647390.61	4196399.7	647390.61_4196399.7	2.65513	0.51287	0.1447	0.05998	0.0492	0.03344	0.81946
647410.61	4196399.7	647410.61_4196399.7	2.88115	0.51376	0.14369	0.05967	0.0488	0.03363	0.80532
647430.61	4196399.7	647430.61_4196399.7	3.16185	0.51619	0.1429	0.05931	0.04842	0.03383	0.79244
647450.61	4196399.7	647450.61_4196399.7	3.51608	0.5194	0.14231	0.05896	0.04806	0.03406	0.7807
647470.61	4196399.7	647470.61_4196399.7	3.89082	0.52229	0.14182	0.05865	0.04769	0.03429	0.7693
647490.61	4196399.7	647490.61_4196399.7	4.24014	0.5246	0.14146	0.05835	0.04733	0.03452	0.75871
647510.61	4196399.7	647510.61_4196399.7	4.52246	0.52588	0.14124	0.05809	0.04698	0.03477	0.74902
647530.61	4196399.7	647530.61_4196399.7	4.71481	0.52598	0.14115	0.05781	0.04663	0.03502	0.74016
647550.61	4196399.7	647550.61_4196399.7	4.80787	0.52466	0.14116	0.05756	0.04629	0.03529	0.73196
647570.61	4196399.7	647570.61_4196399.7	4.79673	0.52151	0.14121	0.05738	0.04593	0.03554	0.72361
647590.61	4196399.7	647590.61_4196399.7	4.7408	0.51757	0.14143	0.05714	0.0456	0.03581	0.7161
647610.61	4196399.7	647610.61_4196399.7	4.64554	0.51272	0.14175	0.05691	0.0453	0.03609	0.70873
647630.61	4196399.7	647630.61_4196399.7	4.5281	0.5072	0.14217	0.05668	0.04502	0.03638	0.7013
647650.61	4196399.7	647650.61_4196399.7	4.37183	0.50031	0.14253	0.05651	0.0447	0.03661	0.69261
647350.61	4196419.7	647350.61_4196419.7	2.49823	0.49229	0.14422	0.06023	0.04956	0.03284	0.80407
647370.61	4196419.7	647370.61_4196419.7	2.74245	0.49008	0.14298	0.05983	0.04918	0.03303	0.79137
647390.61	4196419.7	647390.61_4196419.7	3.03774	0.48985	0.14193	0.05941	0.04882	0.03324	0.77913
647410.61	4196419.7	647410.61_4196419.7	3.35715	0.49025	0.14091	0.0591	0.04842	0.03342	0.76581
647430.61	4196419.7	647430.61_4196419.7	3.75727	0.49182	0.14005	0.05878	0.04803	0.03361	0.75309
647450.61	4196419.7	647450.61_4196419.7	4.28767	0.49487	0.13944	0.05842	0.04768	0.03384	0.74219
647470.61	4196419.7	647470.61_4196419.7	4.81269	0.49777	0.13893	0.05811	0.04732	0.03407	0.73151
647490.61	4196419.7	647490.61_4196419.7	5.23237	0.50012	0.13851	0.05785	0.04695	0.03429	0.72126
647510.61	4196419.7	647510.61_4196419.7	5.53231	0.50202	0.13825	0.05756	0.0466	0.03454	0.71219
647530.61	4196419.7	647530.61_4196419.7	5.67914	0.5029	0.13811	0.0573	0.04625	0.03479	0.70389
647550.61	4196419.7	647550.61_4196419.7	5.70661	0.50283	0.13811	0.05701	0.04593	0.03507	0.69655
647570.61	4196419.7	647570.61_4196419.7	5.59674	0.50079	0.13813	0.05684	0.04557	0.03532	0.68878
647590.61	4196419.7	647590.61_4196419.7	5.44587	0.49793	0.1383	0.05661	0.04525	0.03559	0.68179
647610.61	4196419.7	647610.61_4196419.7	5.26613	0.49413	0.13858	0.05637	0.04495	0.03587	0.67504
647630.61	4196419.7	647630.61_4196419.7	5.07422	0.48958	0.13897	0.05614	0.04467	0.03615	0.6683
647650.61	4196419.7	647650.61_4196419.7	4.84752	0.48355	0.13929	0.05598	0.04436	0.03638	0.66037
647370.61	4196439.7	647370.61_4196439.7	3.112	0.46915	0.14026	0.05931	0.04879	0.03282	0.75302
647390.61	4196439.7	647390.61_4196439.7	3.51188	0.46822	0.13917	0.0589	0.04842	0.03301	0.74114
647410.61	4196439.7	647410.61_4196439.7	4.02539	0.46878	0.13825	0.05853	0.04806	0.03322	0.72965
647430.61	4196439.7	647430.61_4196439.7	4.67174	0.46982	0.13737	0.05821	0.04767	0.03341	0.71755
647450.61	4196439.7	647450.61_4196439.7	5.45474	0.47185	0.13665	0.05792	0.04729	0.03361	0.70626
647470.61	4196439.7	647470.61_4196439.7	6.17867	0.47454	0.13611	0.05762	0.04693	0.03383	0.69618
647490.61	4196439.7	647490.61_4196439.7	6.66943	0.47724	0.13569	0.05733	0.04658	0.03407	0.68688
647510.61	4196439.7	647510.61_4196439.7	6.90331	0.47957	0.1354	0.05703	0.04623	0.03431	0.67839
647530.61	4196439.7	647530.61_4196439.7	6.92211	0.48114	0.13523	0.05678	0.04589	0.03457	0.6707
647550.61	4196439.7	647550.61_4196439.7	6.79991	0.48191	0.13521	0.05649	0.04557	0.03485	0.66386
647570.61	4196439.7	647570.61_4196439.7	6.53302	0.48083	0.13517	0.05631	0.04522	0.0351	0.65654
647590.61	4196439.7	647590.61_4196439.7	6.24618	0.47893	0.1353	0.05609	0.0449	0.03537	0.64994
647610.61	4196439.7	647610.61_4196439.7	5.95568	0.47617	0.13555	0.05584	0.0446	0.03565	0.64376
647630.61	4196439.7	647630.61_4196439.7	5.66803	0.47256	0.1359	0.05562	0.04433	0.03593	0.63758
647650.61	4196439.7	647650.61_4196439.7	5.35619	0.46745	0.13619	0.05546	0.04402	0.03616	0.63035
647390.61	4196459.7	647390.61_4196459.7	4.15048	0.44837	0.13654	0.05838	0.04804	0.0328	0.70624
647410.61	4196459.7	647410.61_4196459.7	4.96696	0.44837	0.1356	0.05802	0.04768	0.033	0.69527
647430.61	4196459.7	647430.61_4196459.7	6.21984	0.44966	0.13481	0.05763	0.04732	0.03322	0.6849
647450.61	4196459.7	647450.61_4196459.7	7.53472	0.4512	0.13406	0.05735	0.04694	0.03341	0.67417
647470.61	4196459.7	647470.61_4196459.7	8.39594	0.45337	0.13345	0.05707	0.04657	0.03362	0.6642
647490.61	4196459.7	647490.61_4196459.7	8.75806	0.45604	0.133	0.0568	0.04622	0.03386	0.65545
647510.61	4196459.7	647510.61_4196459.7	8.73781	0.45862	0.13269	0.0565	0.04588	0.0341	0.64751
647530.61	4196459.7	647530.61_4196459.7	8.49589	0.46078	0.13252	0.05624	0.04556	0.03438	0.64044
647550.61	4196459.7	647550.61_4196459.7	8.08791	0.46186	0.1324	0.05597	0.04522	0.03464	0.63354
647570.61	4196459.7	647570.61_4196459.7	7.60265	0.46163	0.13234	0.05579	0.04488	0.03489	0.62668

647590.61	4196459.7	647590.61_4196459.7	7.1367	0.4606	0.13242	0.05558	0.04456	0.03515	0.62044
647610.61	4196459.7	647610.61_4196459.7	6.70305	0.45877	0.13263	0.05533	0.04426	0.03543	0.61465
647630.61	4196459.7	647630.61_4196459.7	6.29818	0.45608	0.13295	0.05508	0.04399	0.03571	0.60895
647650.61	4196459.7	647650.61_4196459.7	5.88618	0.4519	0.13322	0.05494	0.04369	0.03594	0.60236
647410.61	4196479.7	647410.61_4196479.7	6.52823	0.42964	0.13307	0.05749	0.0473	0.03279	0.66363
647430.61	4196479.7	647430.61_4196479.7	9.15364	0.43037	0.13225	0.05714	0.04694	0.033	0.65377
647450.61	4196479.7	647450.61_4196479.7	11.41376	0.43215	0.13158	0.05677	0.0466	0.03322	0.64454
647470.61	4196479.7	647470.61_4196479.7	11.91801	0.43395	0.13093	0.05653	0.04623	0.03342	0.635
647490.61	4196479.7	647490.61_4196479.7	11.62766	0.43626	0.13043	0.05626	0.04587	0.03365	0.62643
647510.61	4196479.7	647510.61_4196479.7	11.10781	0.43916	0.13013	0.05595	0.04555	0.03391	0.61929
647530.61	4196479.7	647530.61_4196479.7	10.34104	0.44121	0.12987	0.05572	0.04521	0.03416	0.61206
647550.61	4196479.7	647550.61_4196479.7	9.58698	0.44293	0.12975	0.05543	0.04489	0.03443	0.6057
647570.61	4196479.7	647570.61_4196479.7	8.80881	0.4434	0.12965	0.05524	0.04455	0.03468	0.59922
647590.61	4196479.7	647590.61_4196479.7	8.10294	0.44299	0.12967	0.05506	0.04422	0.03494	0.5931
647610.61	4196479.7	647610.61_4196479.7	7.49202	0.44195	0.12984	0.05481	0.04392	0.03521	0.58759
647630.61	4196479.7	647630.61_4196479.7	6.9469	0.44009	0.13012	0.05456	0.04365	0.03549	0.58225
647650.61	4196479.7	647650.61_4196479.7	6.42792	0.43692	0.13038	0.0544	0.04336	0.03573	0.57632
647430.61	4196499.7	647430.61_4196499.7	16.15675	0.41275	0.12982	0.05663	0.04658	0.03279	0.62517
647450.61	4196499.7	647450.61_4196499.7	17.72864	0.41401	0.12912	0.05628	0.04624	0.03301	0.61634
647470.61	4196499.7	647470.61_4196499.7	16.88128	0.41601	0.12854	0.05596	0.0459	0.03324	0.60809
647490.61	4196499.7	647490.61_4196499.7	15.38584	0.41822	0.12803	0.05569	0.04555	0.03347	0.6001
647510.61	4196499.7	647510.61_4196499.7	13.79858	0.42033	0.12759	0.05547	0.04519	0.03369	0.59235
647530.61	4196499.7	647530.61_4196499.7	12.40351	0.42256	0.12729	0.05523	0.04485	0.03394	0.58549
647550.61	4196499.7	647550.61_4196499.7	11.18094	0.42454	0.12713	0.05496	0.04453	0.03421	0.57938
647570.61	4196499.7	647570.61_4196499.7	10.11426	0.42601	0.12709	0.05471	0.04422	0.03449	0.57379
647590.61	4196499.7	647590.61_4196499.7	9.13296	0.42624	0.12707	0.05453	0.0439	0.03474	0.56795
647610.61	4196499.7	647610.61_4196499.7	8.29576	0.4257	0.12716	0.05432	0.04359	0.035	0.56241
647630.61	4196499.7	647630.61_4196499.7	7.59052	0.42457	0.12739	0.05405	0.04332	0.03528	0.55731
647650.61	4196499.7	647650.61_4196499.7	6.95335	0.42231	0.12765	0.05389	0.04304	0.03552	0.55189
647450.61	4196519.7	647450.61_4196519.7	25.00516	0.39718	0.12674	0.05579	0.04588	0.0328	0.59018
647470.61	4196519.7	647470.61_4196519.7	22.37083	0.39883	0.12614	0.05549	0.04554	0.03302	0.58238
647490.61	4196519.7	647490.61_4196519.7	19.56384	0.40093	0.12564	0.05519	0.0452	0.03326	0.57503
647510.61	4196519.7	647510.61_4196519.7	16.80269	0.40276	0.12514	0.05498	0.04484	0.03347	0.56743
647530.61	4196519.7	647530.61_4196519.7	14.63013	0.40501	0.12482	0.05473	0.0445	0.03372	0.56088
647550.61	4196519.7	647550.61_4196519.7	12.87317	0.40726	0.12465	0.05449	0.04419	0.03399	0.55512
647570.61	4196519.7	647570.61_4196519.7	11.41178	0.40911	0.12458	0.05422	0.04389	0.03428	0.54979
647590.61	4196519.7	647590.61_4196519.7	10.1472	0.41	0.12455	0.05401	0.04358	0.03454	0.54434
647610.61	4196519.7	647610.61_4196519.7	9.07637	0.41002	0.12459	0.05382	0.04327	0.03479	0.53895
647630.61	4196519.7	647630.61_4196519.7	8.20108	0.40952	0.12478	0.05357	0.04299	0.03506	0.53403
647650.61	4196519.7	647650.61_4196519.7	7.4437	0.4081	0.12502	0.05338	0.04273	0.03531	0.52903
647670.61	4196519.7	647670.61_4196519.7	6.76189	0.40541	0.12524	0.05324	0.04244	0.03551	0.52352
647470.61	4196539.7	647470.61_4196539.7	27.58942	0.38285	0.12383	0.05501	0.04518	0.03281	0.55842
647490.61	4196539.7	647490.61_4196539.7	23.83879	0.38476	0.12333	0.05469	0.04486	0.03305	0.55158
647510.61	4196539.7	647510.61_4196539.7	20.13164	0.3868	0.12288	0.05444	0.04452	0.03329	0.5449
647530.61	4196539.7	647530.61_4196539.7	16.92468	0.3887	0.12248	0.05424	0.04417	0.03352	0.53821
647550.61	4196539.7	647550.61_4196539.7	14.51819	0.3909	0.12226	0.05403	0.04385	0.03378	0.53248
647570.61	4196539.7	647570.61_4196539.7	12.61765	0.39286	0.12213	0.05376	0.04355	0.03405	0.52722
647590.61	4196539.7	647590.61_4196539.7	11.05585	0.39418	0.12207	0.05354	0.04324	0.03431	0.522
647610.61	4196539.7	647610.61_4196539.7	9.78672	0.39489	0.12211	0.05334	0.04295	0.03458	0.51703
647630.61	4196539.7	647630.61_4196539.7	8.7423	0.39491	0.12225	0.0531	0.04267	0.03485	0.51223
647650.61	4196539.7	647650.61_4196539.7	7.87925	0.3943	0.1225	0.05286	0.04242	0.03511	0.50763
647670.61	4196539.7	647670.61_4196539.7	7.10381	0.3923	0.12269	0.05274	0.04213	0.0353	0.50244
647470.61	4196559.7	647470.61_4196559.7	31.98325	0.36807	0.12163	0.05451	0.04485	0.03261	0.53627
647490.61	4196559.7	647490.61_4196559.7	27.70313	0.36954	0.12108	0.05424	0.04451	0.03284	0.52953
647510.61	4196559.7	647510.61_4196559.7	23.15126	0.37159	0.12066	0.05395	0.04419	0.03309	0.5235
647530.61	4196559.7	647530.61_4196559.7	19.11569	0.37355	0.12027	0.05373	0.04386	0.03333	0.51736
647550.61	4196559.7	647550.61_4196559.7	15.99256	0.37548	0.11996	0.05355	0.04352	0.03357	0.51146
647570.61	4196559.7	647570.61_4196559.7	13.68795	0.37758	0.11981	0.05327	0.04322	0.03384	0.50639
647590.61	4196559.7	647590.61_4196559.7	11.85333	0.37925	0.11974	0.05305	0.04292	0.03411	0.50142
647610.61	4196559.7	647610.61_4196559.7	10.38152	0.38036	0.11975	0.05285	0.04263	0.03438	0.49659
647630.61	4196559.7	647630.61_4196559.7	9.18954	0.38085	0.11984	0.05263	0.04235	0.03464	0.4919
647650.61	4196559.7	647650.61_4196559.7	8.23043	0.38084	0.12007	0.05236	0.04211	0.0349	0.48755
647670.61	4196559.7	647670.61_4196559.7	7.38481	0.37956	0.12024	0.05224	0.04182	0.0351	0.48268
647490.61	4196579.7	647490.61_4196579.7	31.01865	0.35553	0.11895	0.05376	0.04418	0.03264	0.50923
647510.61	4196579.7	647510.61_4196579.7	25.4389	0.3572	0.11848	0.0535	0.04385	0.03288	0.50324
647530.61	4196579.7	647530.61_4196579.7	20.86762	0.35931	0.11813	0.05322	0.04355	0.03314	0.49782
647550.61	4196579.7	647550.61_4196579.7	17.19784	0.36121	0.1178	0.05302	0.04322	0.03339	0.49216
647570.61	4196579.7	647570.61_4196579.7	14.54306	0.36337	0.11763	0.05277	0.04292	0.03366	0.48722
647590.61	4196579.7	647590.61_4196579.7	12.4696	0.36518	0.11753	0.05255	0.04262	0.03393	0.48237
647610.61	4196579.7	647610.61_4196579.7	10.83714	0.36658	0.1175	0.05235	0.04233	0.03419	0.47766
647630.61	4196579.7	647630.61_4196579.7	9.53009	0.36745	0.11755	0.05214	0.04205	0.03445	0.47306
647650.61	4196579.7	647650.61_4196579.7	8.48013	0.36776	0.11771	0.05188	0.04179	0.0347	0.46868
647670.61	4196579.7	647670.61_4196579.7	7.59777	0.36723	0.11789	0.05174	0.04153	0.03491	0.4642
647690.61	4196579.7	647690.61_4196579.7	6.84067	0.36568	0.11806	0.05162	0.04125	0.03507	0.45954
647510.61	4196599.7	647510.61_4196599.7	26.91794	0.34385	0.1164	0.05302	0.04353	0.03268	0.48443
647530.61	4196599.7	647530.61_4196599.7	21.86445	0.34581	0.11605	0.05274	0.04323	0.03295	0.47932
647550.61	4196599.7	647550.61_4196599.7	17.95514	0.34781	0.11574	0.0525	0.04292	0.03321	0.47416
647570.61	4196599.7	647570.61_4196599.7	15.02089	0.34978	0.11551	0.0523	0.04261	0.03347	0.46916
647590.61	4196599.7	647590.61_4196599.7	12.8021	0.35166	0.11537	0.05208	0.04231	0.03373	0.4644
647610.61	4196599.7	647610.61_4196599.7	11.07458	0.35324	0.1153	0.05186	0.04203	0.03399	0.45975
647630.61	4196599.7	647630.61_4196599.7	9.70937	0.35441	0.11532	0.05167	0.04175	0.03424	0.45525

647650.61	4196599.7	647650.61_4196599.7	8.60983	0.35503	0.11542	0.05145	0.04148	0.03448	0.45088
647670.61	4196599.7	647670.61_4196599.7	7.69316	0.35485	0.11555	0.05131	0.04121	0.03468	0.44644
647690.61	4196599.7	647690.61_4196599.7	6.93459	0.35403	0.11574	0.05117	0.04095	0.03486	0.44216
647510.61	4196619.7	647510.61_4196619.7	27.49134	0.33142	0.11441	0.05254	0.04322	0.03249	0.46695
647530.61	4196619.7	647530.61_4196619.7	22.08296	0.33308	0.11402	0.05227	0.04291	0.03275	0.46189
647550.61	4196619.7	647550.61_4196619.7	18.03152	0.33485	0.11367	0.05205	0.0426	0.033	0.45684
647570.61	4196619.7	647570.61_4196619.7	15.01454	0.33665	0.11339	0.05188	0.04228	0.03325	0.45183
647590.61	4196619.7	647590.61_4196619.7	12.78662	0.33856	0.11323	0.05165	0.04199	0.03351	0.44719
647610.61	4196619.7	647610.61_4196619.7	11.06492	0.34026	0.11314	0.05143	0.0417	0.03377	0.44267
647630.61	4196619.7	647630.61_4196619.7	9.70791	0.34166	0.11314	0.05126	0.04143	0.03402	0.4383
647650.61	4196619.7	647650.61_4196619.7	8.61297	0.34261	0.1132	0.05105	0.04116	0.03426	0.43402
647670.61	4196619.7	647670.61_4196619.7	7.7151	0.34296	0.11332	0.05086	0.0409	0.03447	0.42986
647510.61	4196639.7	647510.61_4196639.7	27.09437	0.31981	0.11248	0.05208	0.0429	0.0323	0.45048
647530.61	4196639.7	647530.61_4196639.7	21.63512	0.32119	0.11207	0.05182	0.0426	0.03256	0.44556
647550.61	4196639.7	647550.61_4196639.7	17.68145	0.3228	0.11172	0.05158	0.04229	0.03281	0.44075
647570.61	4196639.7	647570.61_4196639.7	14.73328	0.32449	0.11141	0.05142	0.04198	0.03306	0.43586
647590.61	4196639.7	647590.61_4196639.7	12.57071	0.32631	0.11122	0.05119	0.04168	0.03332	0.43129
647610.61	4196639.7	647610.61_4196639.7	10.91043	0.3281	0.11111	0.05099	0.0414	0.03357	0.42688
647630.61	4196639.7	647630.61_4196639.7	9.59296	0.32961	0.11105	0.05082	0.04112	0.03382	0.42255
647650.61	4196639.7	647650.61_4196639.7	8.53222	0.33078	0.11108	0.05063	0.04085	0.03405	0.41834
647670.61	4196639.7	647670.61_4196639.7	7.66217	0.33149	0.11117	0.05041	0.0406	0.03426	0.41429
647690.61	4196639.7	647690.61_4196639.7	6.93471	0.33163	0.11133	0.05027	0.04035	0.03444	0.41038
647710.61	4196639.7	647710.61_4196639.7	6.31825	0.33118	0.11153	0.0501	0.0401	0.03458	0.40666
647510.61	4196659.7	647510.61_4196659.7	26.01082	0.30904	0.11066	0.05159	0.04262	0.03213	0.43522
647530.61	4196659.7	647530.61_4196659.7	20.72356	0.31013	0.11022	0.05135	0.0423	0.03238	0.43038
647550.61	4196659.7	647550.61_4196659.7	16.9884	0.31156	0.10986	0.05111	0.042	0.03264	0.42571
647570.61	4196659.7	647570.61_4196659.7	14.25943	0.31318	0.10955	0.05091	0.0417	0.03289	0.42111
647590.61	4196659.7	647590.61_4196659.7	12.23612	0.31502	0.10934	0.0507	0.04141	0.03315	0.4167
647610.61	4196659.7	647610.61_4196659.7	10.66911	0.3168	0.1092	0.05049	0.04113	0.03341	0.41238
647630.61	4196659.7	647630.61_4196659.7	9.42215	0.3184	0.10912	0.05031	0.04085	0.03365	0.40812
647650.61	4196659.7	647650.61_4196659.7	8.41179	0.31974	0.10912	0.05014	0.04059	0.03388	0.40398
647670.61	4196659.7	647670.61_4196659.7	7.57827	0.32072	0.10918	0.04993	0.04033	0.03409	0.4
647690.61	4196659.7	647690.61_4196659.7	6.88012	0.32121	0.10931	0.04978	0.04008	0.03427	0.3962
647710.61	4196659.7	647710.61_4196659.7	6.28549	0.32119	0.10949	0.04962	0.03984	0.03441	0.39261
647510.61	4196679.7	647510.61_4196679.7	24.07251	0.29875	0.10885	0.05115	0.04231	0.03194	0.42058
647530.61	4196679.7	647530.61_4196679.7	19.35065	0.29967	0.1084	0.05089	0.04201	0.03219	0.41595
647550.61	4196679.7	647550.61_4196679.7	15.99408	0.3009	0.10802	0.05065	0.0417	0.03245	0.41141
647570.61	4196679.7	647570.61_4196679.7	13.54286	0.30235	0.10769	0.05046	0.0414	0.0327	0.40696
647590.61	4196679.7	647590.61_4196679.7	11.71143	0.3041	0.10746	0.05026	0.04112	0.03296	0.40266
647610.61	4196679.7	647610.61_4196679.7	10.2944	0.30588	0.10732	0.05004	0.04084	0.03322	0.39851
647630.61	4196679.7	647630.61_4196679.7	9.11996	0.3074	0.10719	0.04987	0.04055	0.03345	0.39417
647650.61	4196679.7	647650.61_4196679.7	8.18439	0.30884	0.10716	0.04972	0.04029	0.03368	0.3901
647670.61	4196679.7	647670.61_4196679.7	7.41508	0.31009	0.10721	0.0495	0.04004	0.03389	0.38626
647690.61	4196679.7	647690.61_4196679.7	6.76583	0.31095	0.10732	0.04933	0.0398	0.03408	0.38263
647710.61	4196679.7	647710.61_4196679.7	6.19195	0.31114	0.10745	0.04919	0.03955	0.03421	0.37902
647730.61	4196679.7	647730.61_4196679.7	5.7036	0.31092	0.10764	0.04902	0.03932	0.03431	0.37577
647750.61	4196679.7	647750.61_4196679.7	5.2779	0.31019	0.10788	0.04886	0.0391	0.03437	0.37282
647770.61	4196679.7	647770.61_4196679.7	4.90609	0.309	0.10818	0.04873	0.03889	0.03439	0.37024
647790.61	4196679.7	647790.61_4196679.7	4.57725	0.30737	0.10851	0.04857	0.03869	0.03437	0.36797
647810.61	4196679.7	647810.61_4196679.7	4.28216	0.30528	0.10886	0.04842	0.0385	0.0343	0.36595
647830.61	4196679.7	647830.61_4196679.7	4.01641	0.30279	0.10923	0.04831	0.03832	0.03419	0.36416
647850.61	4196679.7	647850.61_4196679.7	3.77741	0.30005	0.10961	0.04819	0.03814	0.03404	0.36258
647870.61	4196679.7	647870.61_4196679.7	3.56102	0.29708	0.11001	0.04806	0.03797	0.03386	0.36118
647490.61	4196699.7	647490.61_4196699.7	27.45252	0.28882	0.10764	0.05095	0.04232	0.03152	0.41135
647510.61	4196699.7	647510.61_4196699.7	21.66453	0.28898	0.10708	0.05072	0.042	0.03175	0.40663
647530.61	4196699.7	647530.61_4196699.7	17.77235	0.28985	0.10665	0.05044	0.04171	0.03201	0.40234
647550.61	4196699.7	647550.61_4196699.7	14.82847	0.29071	0.10622	0.05024	0.04139	0.03225	0.39776
647570.61	4196699.7	647570.61_4196699.7	12.71397	0.29205	0.10589	0.05003	0.0411	0.0325	0.39348
647590.61	4196699.7	647590.61_4196699.7	11.10415	0.29365	0.10564	0.04984	0.04082	0.03277	0.38933
647610.61	4196699.7	647610.61_4196699.7	9.84723	0.29544	0.10549	0.0496	0.04056	0.03303	0.38532
647630.61	4196699.7	647630.61_4196699.7	8.77667	0.29691	0.10533	0.04944	0.04026	0.03325	0.38103
647650.61	4196699.7	647650.61_4196699.7	7.92343	0.29845	0.10527	0.04929	0.04	0.03348	0.37706
647670.61	4196699.7	647670.61_4196699.7	7.21329	0.29982	0.10529	0.0491	0.03975	0.03369	0.37328
647690.61	4196699.7	647690.61_4196699.7	6.61266	0.30094	0.10539	0.04888	0.03952	0.03388	0.36975
647710.61	4196699.7	647710.61_4196699.7	6.07112	0.30139	0.10548	0.04877	0.03926	0.034	0.36619
647730.61	4196699.7	647730.61_4196699.7	5.61233	0.30156	0.10566	0.04859	0.03904	0.03411	0.36306
647750.61	4196699.7	647750.61_4196699.7	5.21005	0.30126	0.10589	0.04843	0.03882	0.03418	0.36026
647770.61	4196699.7	647770.61_4196699.7	4.85202	0.30042	0.10615	0.0483	0.03861	0.0342	0.35774
647790.61	4196699.7	647790.61_4196699.7	4.53543	0.29919	0.10647	0.04814	0.03842	0.03417	0.35558
647810.61	4196699.7	647810.61_4196699.7	4.25142	0.29752	0.10681	0.04797	0.03823	0.03411	0.35372
647830.61	4196699.7	647830.61_4196699.7	3.99174	0.29538	0.10716	0.04787	0.03804	0.034	0.35203
647850.61	4196699.7	647850.61_4196699.7	3.7589	0.29298	0.10754	0.04774	0.03787	0.03385	0.35062
647870.61	4196699.7	647870.61_4196699.7	3.54666	0.29031	0.10792	0.04761	0.03771	0.03367	0.34936
647470.61	4196719.7	647470.61_4196719.7	30.71039	0.2804	0.10656	0.05079	0.04233	0.03112	0.4027
647490.61	4196719.7	647490.61_4196719.7	23.89871	0.27991	0.10595	0.05051	0.04202	0.03134	0.39809
647510.61	4196719.7	647510.61_4196719.7	19.35811	0.28003	0.10542	0.05024	0.04172	0.03158	0.39374
647530.61	4196719.7	647530.61_4196719.7	16.15275	0.28057	0.10496	0.05	0.04142	0.03183	0.38947
647550.61	4196719.7	647550.61_4196719.7	13.6916	0.28124	0.1045	0.04981	0.0411	0.03206	0.38498
647570.61	4196719.7	647570.61_4196719.7	11.89957	0.28242	0.10417	0.0496	0.04081	0.03232	0.38085
647590.61	4196719.7	647590.61_4196719.7	10.4963	0.28387	0.1039	0.04941	0.04053	0.03258	0.3768
647610.61	4196719.7	647610.61_4196719.7	9.3844	0.28556	0.10372	0.04917	0.04027	0.03284	0.37287

647630.61	4196719.7	647630.61_4196719.7	8.42385	0.287	0.10354	0.04902	0.03998	0.03307	0.3687
647650.61	4196719.7	647650.61_4196719.7	7.6459	0.28855	0.10345	0.04887	0.03972	0.03329	0.36477
647670.61	4196719.7	647670.61_4196719.7	6.99343	0.29	0.10345	0.04868	0.03947	0.0335	0.36106
647690.61	4196719.7	647690.61_4196719.7	6.43923	0.29129	0.10353	0.04846	0.03924	0.03368	0.3576
647710.61	4196719.7	647710.61_4196719.7	5.93326	0.29197	0.10359	0.04835	0.03898	0.03381	0.3541
647730.61	4196719.7	647730.61_4196719.7	5.50284	0.29243	0.10375	0.04819	0.03876	0.03391	0.35104
647750.61	4196719.7	647750.61_4196719.7	5.12344	0.29247	0.10396	0.04801	0.03855	0.03398	0.34832
647770.61	4196719.7	647770.61_4196719.7	4.78204	0.292	0.1042	0.04786	0.03834	0.034	0.34587
647790.61	4196719.7	647790.61_4196719.7	4.48555	0.29127	0.10453	0.04769	0.03816	0.03399	0.34392
647810.61	4196719.7	647810.61_4196719.7	4.2096	0.28993	0.10483	0.04753	0.03797	0.03393	0.34211
647830.61	4196719.7	647830.61_4196719.7	3.95733	0.28813	0.10516	0.04742	0.03778	0.03381	0.34051
647850.61	4196719.7	647850.61_4196719.7	3.73007	0.28604	0.10551	0.0473	0.03761	0.03366	0.33919
647870.61	4196719.7	647870.61_4196719.7	3.52297	0.28367	0.10588	0.04717	0.03744	0.03348	0.33806
647450.61	4196739.7	647450.61_4196739.7	33.41813	0.27324	0.10562	0.05062	0.04234	0.03072	0.39444
647470.61	4196739.7	647470.61_4196739.7	25.73432	0.27216	0.10494	0.05034	0.04203	0.03094	0.38995
647490.61	4196739.7	647490.61_4196739.7	20.71866	0.27167	0.10435	0.05006	0.04173	0.03117	0.38572
647510.61	4196739.7	647510.61_4196739.7	17.22863	0.27156	0.10381	0.04978	0.04144	0.03141	0.38153
647530.61	4196739.7	647530.61_4196739.7	14.61423	0.27177	0.1033	0.04959	0.04112	0.03165	0.37722
647550.61	4196739.7	647550.61_4196739.7	12.63555	0.27236	0.10285	0.04939	0.04082	0.03188	0.37296
647570.61	4196739.7	647570.61_4196739.7	11.11696	0.27331	0.10249	0.04918	0.04052	0.03213	0.36889
647590.61	4196739.7	647590.61_4196739.7	9.90458	0.27457	0.1022	0.04899	0.04024	0.03239	0.36491
647610.61	4196739.7	647610.61_4196739.7	8.93211	0.27616	0.102	0.04876	0.03999	0.03265	0.36112
647630.61	4196739.7	647630.61_4196739.7	8.06782	0.27754	0.1018	0.04861	0.03969	0.03287	0.357
647650.61	4196739.7	647650.61_4196739.7	7.36454	0.27907	0.1017	0.04845	0.03944	0.0331	0.35316
647670.61	4196739.7	647670.61_4196739.7	6.76683	0.28058	0.10167	0.04828	0.03919	0.0333	0.34951
647690.61	4196739.7	647690.61_4196739.7	6.2565	0.28198	0.10173	0.04805	0.03896	0.03349	0.34612
647710.61	4196739.7	647710.61_4196739.7	5.78419	0.28285	0.10176	0.04794	0.03871	0.03361	0.34266
647730.61	4196739.7	647730.61_4196739.7	5.38191	0.28356	0.1019	0.04778	0.03849	0.03372	0.33968
647750.61	4196739.7	647750.61_4196739.7	5.02514	0.28392	0.10209	0.04759	0.03828	0.03379	0.33702
647770.61	4196739.7	647770.61_4196739.7	4.70027	0.28377	0.1023	0.04744	0.03807	0.0338	0.33461
647790.61	4196739.7	647790.61_4196739.7	4.41748	0.28335	0.10261	0.04728	0.03789	0.0338	0.33271
647810.61	4196739.7	647810.61_4196739.7	4.15248	0.28236	0.10289	0.04713	0.0377	0.03373	0.33096
647830.61	4196739.7	647830.61_4196739.7	3.90644	0.28084	0.10318	0.04702	0.03751	0.0336	0.32938
647850.61	4196739.7	647850.61_4196739.7	3.68453	0.27901	0.10351	0.04692	0.03733	0.03345	0.3281
647870.61	4196739.7	647870.61_4196739.7	3.48403	0.27694	0.10387	0.0468	0.03716	0.03327	0.32707
647430.61	4196759.7	647430.61_4196759.7	34.78497	0.26721	0.10478	0.0505	0.04235	0.03034	0.38649
647450.61	4196759.7	647450.61_4196759.7	26.84175	0.26554	0.10403	0.0502	0.04204	0.03054	0.38213
647470.61	4196759.7	647470.61_4196759.7	21.68362	0.2645	0.10338	0.04987	0.04175	0.03077	0.37806
647490.61	4196759.7	647490.61_4196759.7	17.98183	0.26373	0.10276	0.04964	0.04144	0.031	0.37384
647510.61	4196759.7	647510.61_4196759.7	15.31494	0.26345	0.10221	0.04937	0.04114	0.03123	0.36975
647530.61	4196759.7	647530.61_4196759.7	13.30655	0.26357	0.10172	0.04916	0.04085	0.03147	0.36572
647550.61	4196759.7	647550.61_4196759.7	11.67714	0.26394	0.10124	0.04898	0.04053	0.0317	0.36154
647570.61	4196759.7	647570.61_4196759.7	10.3984	0.26473	0.10086	0.04876	0.04024	0.03195	0.35755
647590.61	4196759.7	647590.61_4196759.7	9.36309	0.26586	0.10056	0.04856	0.03996	0.03221	0.35371
647610.61	4196759.7	647610.61_4196759.7	8.50474	0.26729	0.10035	0.04836	0.0397	0.03247	0.34997
647630.61	4196759.7	647630.61_4196759.7	7.73183	0.26859	0.10013	0.04821	0.03942	0.03269	0.34596
647650.61	4196759.7	647650.61_4196759.7	7.08805	0.27004	0.1	0.04803	0.03916	0.0329	0.34215
647670.61	4196759.7	647670.61_4196759.7	6.54087	0.27156	0.09995	0.04788	0.03891	0.03311	0.33856
647690.61	4196759.7	647690.61_4196759.7	6.07262	0.27306	0.09999	0.04766	0.03869	0.0333	0.33526
647710.61	4196759.7	647710.61_4196759.7	5.63042	0.27404	0.1	0.04753	0.03844	0.03342	0.33183
647730.61	4196759.7	647730.61_4196759.7	5.25396	0.27495	0.10011	0.04738	0.03822	0.03352	0.32889
647750.61	4196759.7	647750.61_4196759.7	4.91982	0.27557	0.10028	0.04718	0.03801	0.0336	0.32631
647770.61	4196759.7	647770.61_4196759.7	4.611	0.27569	0.10047	0.04704	0.0378	0.03361	0.32393
647790.61	4196759.7	647790.61_4196759.7	4.33916	0.27555	0.10075	0.04688	0.03762	0.0336	0.32203
647810.61	4196759.7	647810.61_4196759.7	4.0884	0.27494	0.10103	0.04673	0.03744	0.03354	0.32038
647830.61	4196759.7	647830.61_4196759.7	3.8512	0.27375	0.10129	0.04661	0.03724	0.03341	0.31886
647850.61	4196759.7	647850.61_4196759.7	3.63931	0.27231	0.10162	0.04651	0.03707	0.03326	0.3177
647410.61	4196779.7	647410.61_4196779.7	34.8043	0.26228	0.10405	0.05038	0.04236	0.02998	0.37889
647430.61	4196779.7	647430.61_4196779.7	27.21871	0.26006	0.10324	0.05008	0.04206	0.03017	0.37467
647450.61	4196779.7	647450.61_4196779.7	22.1967	0.2584	0.10253	0.04975	0.04176	0.03039	0.37068
647470.61	4196779.7	647470.61_4196779.7	18.49349	0.25704	0.10182	0.04948	0.04145	0.03059	0.36649
647490.61	4196779.7	647490.61_4196779.7	15.77605	0.25614	0.10119	0.04925	0.04114	0.03081	0.36241
647510.61	4196779.7	647510.61_4196779.7	13.73374	0.25569	0.10063	0.049	0.04084	0.03104	0.35845
647530.61	4196779.7	647530.61_4196779.7	12.1438	0.25565	0.10014	0.04877	0.04054	0.03128	0.35458
647550.61	4196779.7	647550.61_4196779.7	10.84544	0.25597	0.09968	0.04856	0.04025	0.03152	0.35069
647570.61	4196779.7	647570.61_4196779.7	9.76373	0.25661	0.09929	0.04834	0.03996	0.03176	0.3468
647590.61	4196779.7	647590.61_4196779.7	8.86948	0.25758	0.09899	0.04815	0.03968	0.03202	0.34306
647610.61	4196779.7	647610.61_4196779.7	8.11077	0.25883	0.09875	0.04796	0.03942	0.03228	0.33939
647630.61	4196779.7	647630.61_4196779.7	7.4193	0.26007	0.09852	0.04781	0.03914	0.0325	0.33549
647650.61	4196779.7	647650.61_4196779.7	6.83215	0.26146	0.09836	0.04762	0.03888	0.03271	0.33176
647670.61	4196779.7	647670.61_4196779.7	6.33121	0.26296	0.0983	0.04747	0.03864	0.03292	0.32826
647690.61	4196779.7	647690.61_4196779.7	5.89313	0.26448	0.0983	0.04727	0.03842	0.03311	0.32497
647710.61	4196779.7	647710.61_4196779.7	5.48052	0.26558	0.0983	0.04713	0.03817	0.03323	0.32161
647730.61	4196779.7	647730.61_4196779.7	5.12515	0.26661	0.09838	0.04698	0.03795	0.03333	0.31868
647750.61	4196779.7	647750.61_4196779.7	4.81134	0.26746	0.09854	0.04679	0.03775	0.03341	0.31616
647770.61	4196779.7	647770.61_4196779.7	4.51678	0.26782	0.0987	0.04664	0.03754	0.03342	0.31379
647790.61	4196779.7	647790.61_4196779.7	4.25603	0.26793	0.09894	0.04649	0.03735	0.0334	0.31188
647810.61	4196779.7	647810.61_4196779.7	4.0177	0.26764	0.09922	0.04633	0.03718	0.03334	0.3103
647830.61	4196779.7	647830.61_4196779.7	3.78935	0.26675	0.09946	0.04622	0.03698	0.03322	0.30882
647390.61	4196799.7	647390.61_4196799.7	34.68718	0.25822	0.10343	0.0503	0.04237	0.02962	0.37152
647410.61	4196799.7	647410.61_4196799.7	27.39952	0.25554	0.10256	0.04994	0.04207	0.02981	0.36751

647430.61	4196799.7	647430.61_4196799.7	22.54631	0.25334	0.10178	0.04963	0.04178	0.03002	0.36361
647450.61	4196799.7	647450.61_4196799.7	18.90186	0.25139	0.101	0.04937	0.04146	0.0302	0.35948
647470.61	4196799.7	647470.61_4196799.7	16.21398	0.24995	0.1003	0.04908	0.04115	0.03041	0.35549
647490.61	4196799.7	647490.61_4196799.7	14.16666	0.24901	0.09969	0.04885	0.04085	0.03063	0.35165
647510.61	4196799.7	647510.61_4196799.7	12.54696	0.24844	0.09913	0.04859	0.04055	0.03086	0.34786
647530.61	4196799.7	647530.61_4196799.7	11.23672	0.24827	0.09862	0.04836	0.04026	0.0311	0.3441
647550.61	4196799.7	647550.61_4196799.7	10.14395	0.24842	0.09817	0.04816	0.03997	0.03134	0.34035
647570.61	4196799.7	647570.61_4196799.7	9.21809	0.24892	0.09777	0.04795	0.03968	0.03158	0.33659
647590.61	4196799.7	647590.61_4196799.7	8.42836	0.24973	0.09744	0.04776	0.0394	0.03183	0.33289
647610.61	4196799.7	647610.61_4196799.7	7.74086	0.25076	0.09716	0.04759	0.03913	0.03208	0.32922
647630.61	4196799.7	647630.61_4196799.7	7.13563	0.25201	0.09694	0.04741	0.03887	0.03232	0.32556
647650.61	4196799.7	647650.61_4196799.7	6.60008	0.25334	0.09678	0.04722	0.03862	0.03253	0.32193
647670.61	4196799.7	647670.61_4196799.7	6.1305	0.25476	0.09669	0.04707	0.03837	0.03273	0.31845
647690.61	4196799.7	647690.61_4196799.7	5.71778	0.25624	0.09667	0.04689	0.03814	0.03291	0.31517
647710.61	4196799.7	647710.61_4196799.7	5.33454	0.25745	0.09666	0.04674	0.0379	0.03304	0.31191
647730.61	4196799.7	647730.61_4196799.7	4.99883	0.25858	0.09672	0.04658	0.03769	0.03314	0.30903
647750.61	4196799.7	647750.61_4196799.7	4.70276	0.25961	0.09686	0.0464	0.03749	0.03322	0.30654
647770.61	4196799.7	647770.61_4196799.7	4.42059	0.26014	0.09699	0.04625	0.03728	0.03323	0.30417
647790.61	4196799.7	647790.61_4196799.7	4.1703	0.26047	0.0972	0.04609	0.03709	0.03321	0.30226
647810.61	4196799.7	647810.61_4196799.7	3.94285	0.26048	0.09747	0.04594	0.03692	0.03315	0.30071
647830.61	4196799.7	647830.61_4196799.7	3.72254	0.25987	0.09769	0.04583	0.03672	0.03302	0.29925
647370.61	4196819.7	647370.61_4196819.7	34.86398	0.25495	0.1029	0.05023	0.04238	0.02928	0.36432
647390.61	4196819.7	647390.61_4196819.7	28.03787	0.25181	0.10197	0.04988	0.04209	0.02946	0.3605
647410.61	4196819.7	647410.61_4196819.7	23.18859	0.24913	0.10113	0.0495	0.0418	0.02966	0.35674
647430.61	4196819.7	647430.61_4196819.7	19.49633	0.24672	0.10028	0.04924	0.04148	0.02983	0.35275
647450.61	4196819.7	647450.61_4196819.7	16.76826	0.24477	0.09953	0.04897	0.04117	0.03002	0.34887
647470.61	4196819.7	647470.61_4196819.7	14.67992	0.2433	0.09885	0.04867	0.04086	0.03023	0.34513
647490.61	4196819.7	647490.61_4196819.7	13.02124	0.24228	0.09824	0.04843	0.04057	0.03046	0.34148
647510.61	4196819.7	647510.61_4196819.7	11.6896	0.24168	0.0977	0.04816	0.04029	0.0307	0.33793
647530.61	4196819.7	647530.61_4196819.7	10.54924	0.24133	0.09717	0.04794	0.03999	0.03093	0.33426
647550.61	4196819.7	647550.61_4196819.7	9.58589	0.24132	0.0967	0.04776	0.03969	0.03116	0.33056
647570.61	4196819.7	647570.61_4196819.7	8.76958	0.24167	0.0963	0.04756	0.03941	0.03141	0.32693
647590.61	4196819.7	647590.61_4196819.7	8.05953	0.24233	0.09595	0.04736	0.03913	0.03165	0.32331
647610.61	4196819.7	647610.61_4196819.7	7.43579	0.24324	0.09566	0.04719	0.03886	0.0319	0.31971
647630.61	4196819.7	647630.61_4196819.7	6.8813	0.24431	0.09542	0.04702	0.0386	0.03213	0.31613
647650.61	4196819.7	647650.61_4196819.7	6.38434	0.24557	0.09525	0.04684	0.03835	0.03235	0.31257
647670.61	4196819.7	647670.61_4196819.7	5.94411	0.24692	0.09513	0.04668	0.0381	0.03254	0.30913
647690.61	4196819.7	647690.61_4196819.7	5.54915	0.24826	0.09507	0.04653	0.03787	0.03271	0.30581
647710.61	4196819.7	647710.61_4196819.7	5.19512	0.24961	0.09506	0.04636	0.03764	0.03285	0.30271
647730.61	4196819.7	647730.61_4196819.7	4.87494	0.25081	0.0951	0.0462	0.03742	0.03295	0.29984
647750.61	4196819.7	647750.61_4196819.7	4.59555	0.25198	0.09523	0.04601	0.03723	0.03303	0.29742
647770.61	4196819.7	647770.61_4196819.7	4.32839	0.25274	0.09536	0.04584	0.03703	0.03305	0.29511
647790.61	4196819.7	647790.61_4196819.7	4.08534	0.25324	0.09553	0.04569	0.03683	0.03302	0.29315
647810.61	4196819.7	647810.61_4196819.7	3.86456	0.25345	0.09576	0.04556	0.03666	0.03296	0.29157
647350.61	4196839.7	647350.61_4196839.7	36.53753	0.2523	0.10245	0.05017	0.04238	0.02895	0.35722
647370.61	4196839.7	647370.61_4196839.7	29.89469	0.24873	0.10146	0.04981	0.04209	0.02912	0.35356
647390.61	4196839.7	647390.61_4196839.7	24.72899	0.24569	0.10057	0.04944	0.04181	0.02931	0.35005
647410.61	4196839.7	647410.61_4196839.7	20.62824	0.24281	0.09966	0.04912	0.04149	0.02947	0.34617
647430.61	4196839.7	647430.61_4196839.7	17.67006	0.24043	0.09885	0.04885	0.04118	0.02966	0.34246
647450.61	4196839.7	647450.61_4196839.7	15.42122	0.23851	0.09811	0.04856	0.04088	0.02985	0.33883
647470.61	4196839.7	647470.61_4196839.7	13.64806	0.23698	0.09743	0.04827	0.04058	0.03006	0.33528
647490.61	4196839.7	647490.61_4196839.7	12.24494	0.23597	0.09684	0.04799	0.0403	0.0303	0.3319
647510.61	4196839.7	647510.61_4196839.7	11.04538	0.23524	0.09629	0.04775	0.04002	0.03053	0.32842
647530.61	4196839.7	647530.61_4196839.7	10.03615	0.23483	0.09578	0.04752	0.03973	0.03077	0.32493
647550.61	4196839.7	647550.61_4196839.7	9.17291	0.23473	0.09532	0.04733	0.03944	0.03101	0.32142
647570.61	4196839.7	647570.61_4196839.7	8.42387	0.23494	0.0949	0.04714	0.03916	0.03126	0.31788
647590.61	4196839.7	647590.61_4196839.7	7.76376	0.23543	0.09454	0.04693	0.03888	0.03149	0.31431
647610.61	4196839.7	647610.61_4196839.7	7.17969	0.23615	0.09423	0.04678	0.0386	0.03173	0.31074
647630.61	4196839.7	647630.61_4196839.7	6.65862	0.23709	0.09397	0.04663	0.03834	0.03196	0.30719
647650.61	4196839.7	647650.61_4196839.7	6.1927	0.23823	0.09377	0.04646	0.03808	0.03217	0.30369
647670.61	4196839.7	647670.61_4196839.7	5.77552	0.23947	0.09363	0.04629	0.03784	0.03236	0.30029
647690.61	4196839.7	647690.61_4196839.7	5.40142	0.24079	0.09355	0.04615	0.03761	0.03253	0.29704
647710.61	4196839.7	647710.61_4196839.7	5.06325	0.24212	0.09352	0.04598	0.03738	0.03266	0.29397
647730.61	4196839.7	647730.61_4196839.7	4.7586	0.24339	0.09354	0.04581	0.03717	0.03276	0.29115
647750.61	4196839.7	647750.61_4196839.7	4.49085	0.24463	0.09366	0.04562	0.03698	0.03285	0.28874
647770.61	4196839.7	647770.61_4196839.7	4.23513	0.24553	0.09376	0.04546	0.03678	0.03286	0.28646
647790.61	4196839.7	647790.61_4196839.7	3.999	0.24615	0.0939	0.04532	0.03658	0.03283	0.28448
647350.61	4196859.7	647350.61_4196859.7	33.2561	0.24624	0.10101	0.04976	0.04208	0.02878	0.34672
647370.61	4196859.7	647370.61_4196859.7	27.5071	0.24284	0.10007	0.04937	0.04181	0.02896	0.34341
647390.61	4196859.7	647390.61_4196859.7	22.91829	0.23979	0.09918	0.04903	0.04153	0.02914	0.34
647410.61	4196859.7	647410.61_4196859.7	19.29185	0.23691	0.09828	0.04871	0.04121	0.02931	0.33633
647430.61	4196859.7	647430.61_4196859.7	16.60781	0.2345	0.09746	0.04845	0.0409	0.02949	0.33274
647450.61	4196859.7	647450.61_4196859.7	14.58067	0.23254	0.09673	0.04816	0.0406	0.02968	0.32929
647470.61	4196859.7	647470.61_4196859.7	13.01808	0.23109	0.09609	0.04785	0.04032	0.02991	0.32605
647490.61	4196859.7	647490.61_4196859.7	11.66714	0.22987	0.09546	0.0476	0.04003	0.03013	0.32263
647510.61	4196859.7	647510.61_4196859.7	10.52955	0.22896	0.09488	0.0474	0.03973	0.03034	0.31916
647530.61	4196859.7	647530.61_4196859.7	9.59756	0.22845	0.09437	0.04718	0.03944	0.03058	0.3158
647550.61	4196859.7	647550.61_4196859.7	8.79389	0.22823	0.0939	0.04697	0.03915	0.03082	0.3124
647570.61	4196859.7	647570.61_4196859.7	8.10953	0.22838	0.0935	0.04677	0.03888	0.03107	0.30904
647590.61	4196859.7	647590.61_4196859.7	7.50332	0.22879	0.09315	0.04654	0.03861	0.03132	0.30564
647610.61	4196859.7	647610.61_4196859.7	6.9631	0.22947	0.09285	0.04637	0.03835	0.03156	0.30223

647630.61	4196859.7	647630.61_4196859.7	6.47696	0.23033	0.09258	0.04621	0.0381	0.0318	0.29881
647650.61	4196859.7	647650.61_4196859.7	6.03565	0.23134	0.09236	0.04605	0.03784	0.03201	0.2954
647670.61	4196859.7	647670.61_4196859.7	5.63417	0.2325	0.0922	0.04588	0.0376	0.0322	0.29203
647690.61	4196859.7	647690.61_4196859.7	5.27253	0.23373	0.09209	0.04575	0.03736	0.03236	0.2888
647710.61	4196859.7	647710.61_4196859.7	4.94398	0.23495	0.09204	0.04559	0.03713	0.03248	0.28572
647730.61	4196859.7	647730.61_4196859.7	4.64659	0.2362	0.09203	0.04544	0.03691	0.03258	0.28288
647750.61	4196859.7	647750.61_4196859.7	4.38818	0.2375	0.09212	0.04526	0.03672	0.03266	0.28048
647770.61	4196859.7	647770.61_4196859.7	4.13813	0.23844	0.0922	0.04512	0.03652	0.03267	0.27816
647350.61	4196879.7	647350.61_4196879.7	31.58735	0.24043	0.09962	0.04936	0.04179	0.02861	0.33673
647370.61	4196879.7	647370.61_4196879.7	26.27614	0.23714	0.09871	0.04896	0.04153	0.0288	0.33365
647390.61	4196879.7	647390.61_4196879.7	21.77398	0.23394	0.09776	0.04867	0.04122	0.02896	0.3302
647410.61	4196879.7	647410.61_4196879.7	18.57634	0.23131	0.09694	0.04831	0.04093	0.02915	0.32697
647430.61	4196879.7	647430.61_4196879.7	16.08748	0.22897	0.09615	0.04801	0.04064	0.02934	0.32368
647450.61	4196879.7	647450.61_4196879.7	14.1181	0.22697	0.09541	0.04774	0.04034	0.02953	0.32034
647470.61	4196879.7	647470.61_4196879.7	12.55495	0.22534	0.09474	0.04748	0.04004	0.02974	0.31706
647490.61	4196879.7	647490.61_4196879.7	11.24535	0.22399	0.0941	0.04724	0.03974	0.02995	0.3137
647510.61	4196879.7	647510.61_4196879.7	10.18096	0.22307	0.09354	0.04702	0.03945	0.03017	0.31045
647530.61	4196879.7	647530.61_4196879.7	9.2821	0.22244	0.09303	0.04679	0.03917	0.03041	0.30718
647550.61	4196879.7	647550.61_4196879.7	8.51489	0.22215	0.09256	0.04658	0.03889	0.03065	0.3039
647570.61	4196879.7	647570.61_4196879.7	7.85186	0.22214	0.09213	0.04639	0.03861	0.03089	0.3006
647590.61	4196879.7	647590.61_4196879.7	7.26881	0.22243	0.09176	0.04618	0.03834	0.03113	0.29727
647610.61	4196879.7	647610.61_4196879.7	6.74914	0.22294	0.09144	0.04602	0.03808	0.03137	0.29389
647630.61	4196879.7	647630.61_4196879.7	6.2863	0.22368	0.09117	0.04586	0.03782	0.0316	0.29055
647650.61	4196879.7	647650.61_4196879.7	5.86761	0.22461	0.09094	0.0457	0.03757	0.03182	0.28723
647670.61	4196879.7	647670.61_4196879.7	5.49186	0.22574	0.09079	0.04551	0.03734	0.03201	0.28402
647690.61	4196879.7	647690.61_4196879.7	5.15053	0.22695	0.09069	0.04535	0.03711	0.03218	0.28092
647710.61	4196879.7	647710.61_4196879.7	4.83876	0.22822	0.09063	0.04519	0.03689	0.03232	0.27797
647730.61	4196879.7	647730.61_4196879.7	4.54327	0.22937	0.09058	0.04507	0.03666	0.0324	0.27506
647750.61	4196879.7	647750.61_4196879.7	4.28901	0.23065	0.09064	0.0449	0.03647	0.03247	0.27261
647330.61	4196899.7	647330.61_4196899.7	35.49615	0.23859	0.09928	0.04939	0.04178	0.02829	0.3303
647350.61	4196899.7	647350.61_4196899.7	30.85346	0.23488	0.09826	0.04895	0.0415	0.02845	0.32723
647370.61	4196899.7	647370.61_4196899.7	25.68318	0.23164	0.09736	0.04857	0.04124	0.02864	0.32429
647390.61	4196899.7	647390.61_4196899.7	21.20147	0.22842	0.0964	0.0483	0.04092	0.02879	0.32094
647410.61	4196899.7	647410.61_4196899.7	18.02033	0.22572	0.09556	0.04798	0.04063	0.02897	0.31777
647430.61	4196899.7	647430.61_4196899.7	15.64804	0.22345	0.0948	0.04765	0.04035	0.02916	0.31469
647450.61	4196899.7	647450.61_4196899.7	13.80905	0.22156	0.09411	0.04734	0.04007	0.02938	0.31169
647470.61	4196899.7	647470.61_4196899.7	12.28522	0.21994	0.09345	0.04708	0.03978	0.02958	0.30859
647490.61	4196899.7	647490.61_4196899.7	11.01504	0.21857	0.09283	0.04682	0.03949	0.0298	0.30543
647510.61	4196899.7	647510.61_4196899.7	9.9539	0.21755	0.09225	0.04661	0.0392	0.03002	0.30224
647530.61	4196899.7	647530.61_4196899.7	9.06053	0.21684	0.09173	0.0464	0.03891	0.03024	0.29905
647550.61	4196899.7	647550.61_4196899.7	8.3029	0.21641	0.09125	0.04619	0.03863	0.03048	0.29583
647570.61	4196899.7	647570.61_4196899.7	7.64962	0.21628	0.09082	0.04601	0.03835	0.03072	0.2926
647590.61	4196899.7	647590.61_4196899.7	7.08227	0.21643	0.09044	0.04583	0.03808	0.03096	0.28936
647610.61	4196899.7	647610.61_4196899.7	6.58129	0.21684	0.09012	0.04564	0.03782	0.0312	0.2861
647630.61	4196899.7	647630.61_4196899.7	6.13365	0.2175	0.08984	0.04548	0.03757	0.03143	0.28283
647650.61	4196899.7	647650.61_4196899.7	5.72798	0.21831	0.08961	0.04533	0.03732	0.03164	0.27957
647670.61	4196899.7	647670.61_4196899.7	5.35877	0.21926	0.08942	0.04516	0.03708	0.03183	0.27636
647690.61	4196899.7	647690.61_4196899.7	5.02633	0.22039	0.08929	0.045	0.03685	0.03199	0.27329
647710.61	4196899.7	647710.61_4196899.7	4.73293	0.2217	0.08924	0.04483	0.03665	0.03215	0.27048
647730.61	4196899.7	647730.61_4196899.7	4.44449	0.22277	0.08917	0.04471	0.03642	0.03222	0.2676
647330.61	4196919.7	647330.61_4196919.7	35.02573	0.23316	0.09794	0.049	0.04149	0.02813	0.32106
647350.61	4196919.7	647350.61_4196919.7	30.57446	0.22951	0.09692	0.04859	0.04121	0.02829	0.31811
647370.61	4196919.7	647370.61_4196919.7	25.44684	0.22636	0.09603	0.04819	0.04095	0.02847	0.31536
647390.61	4196919.7	647390.61_4196919.7	20.96927	0.22318	0.09509	0.04792	0.04064	0.02863	0.31217
647410.61	4196919.7	647410.61_4196919.7	17.78033	0.2205	0.09426	0.04761	0.04035	0.0288	0.30914
647430.61	4196919.7	647430.61_4196919.7	15.4015	0.21821	0.09351	0.04728	0.04006	0.02899	0.30619
647450.61	4196919.7	647450.61_4196919.7	13.58405	0.21634	0.09283	0.04698	0.0398	0.02921	0.30335
647470.61	4196919.7	647470.61_4196919.7	12.03163	0.2146	0.09214	0.04674	0.03949	0.0294	0.30027
647490.61	4196919.7	647490.61_4196919.7	10.79636	0.21326	0.09154	0.04645	0.03921	0.02962	0.2973
647510.61	4196919.7	647510.61_4196919.7	9.76916	0.21223	0.09099	0.04623	0.03894	0.02985	0.29433
647530.61	4196919.7	647530.61_4196919.7	8.89795	0.2115	0.09048	0.046	0.03866	0.03009	0.29131
647550.61	4196919.7	647550.61_4196919.7	8.15149	0.21102	0.09001	0.04579	0.03838	0.03033	0.28824
647570.61	4196919.7	647570.61_4196919.7	7.50475	0.21081	0.08958	0.04562	0.03811	0.03057	0.28511
647590.61	4196919.7	647590.61_4196919.7	6.93908	0.21084	0.08919	0.04544	0.03784	0.03081	0.28192
647610.61	4196919.7	647610.61_4196919.7	6.44201	0.21113	0.08885	0.04525	0.03758	0.03104	0.27871
647630.61	4196919.7	647630.61_4196919.7	5.99991	0.21164	0.08856	0.04509	0.03732	0.03127	0.27549
647650.61	4196919.7	647650.61_4196919.7	5.60585	0.21236	0.08832	0.04495	0.03708	0.03148	0.27232
647670.61	4196919.7	647670.61_4196919.7	5.24923	0.21325	0.08812	0.04478	0.03684	0.03167	0.2692
647690.61	4196919.7	647690.61_4196919.7	4.92279	0.21427	0.08797	0.04462	0.03662	0.03183	0.26617
647710.61	4196919.7	647710.61_4196919.7	4.63282	0.21546	0.0879	0.04446	0.03641	0.03198	0.26336
647330.61	4196939.7	647330.61_4196939.7	34.8739	0.22794	0.09662	0.04861	0.0412	0.02797	0.31222
647350.61	4196939.7	647350.61_4196939.7	30.52473	0.22437	0.09562	0.04822	0.04092	0.02813	0.30944
647370.61	4196939.7	647370.61_4196939.7	25.38294	0.22128	0.09475	0.04782	0.04067	0.02831	0.30683
647390.61	4196939.7	647390.61_4196939.7	20.87109	0.21816	0.09382	0.04754	0.04036	0.02847	0.3038
647410.61	4196939.7	647410.61_4196939.7	17.65856	0.2155	0.093	0.04724	0.04007	0.02864	0.30092
647430.61	4196939.7	647430.61_4196939.7	15.25315	0.21323	0.09225	0.04691	0.03979	0.02883	0.29808
647450.61	4196939.7	647450.61_4196939.7	13.43336	0.21135	0.09158	0.04661	0.03953	0.02905	0.29539
647470.61	4196939.7	647470.61_4196939.7	11.86178	0.20957	0.09089	0.04637	0.03922	0.02923	0.29239
647490.61	4196939.7	647490.61_4196939.7	10.62156	0.20816	0.09028	0.04611	0.03894	0.02945	0.28952
647510.61	4196939.7	647510.61_4196939.7	9.58953	0.20706	0.08972	0.04589	0.03866	0.02968	0.28663
647530.61	4196939.7	647530.61_4196939.7	8.71726	0.20623	0.08921	0.04566	0.03838	0.02991	0.28369

647550.61	4196939.7	647550.61_4196939.7	7.9799	0.2057	0.08875	0.04547	0.03811	0.03015	0.28073
647570.61	4196939.7	647570.61_4196939.7	7.34565	0.20543	0.08832	0.04527	0.03785	0.03039	0.27773
647590.61	4196939.7	647590.61_4196939.7	6.79686	0.20542	0.08794	0.04509	0.03759	0.03064	0.27469
647610.61	4196939.7	647610.61_4196939.7	6.31648	0.20566	0.08761	0.04486	0.03734	0.03088	0.27164
647630.61	4196939.7	647630.61_4196939.7	5.88737	0.20611	0.08733	0.0447	0.03709	0.03112	0.26855
647650.61	4196939.7	647650.61_4196939.7	5.50032	0.20675	0.08708	0.04455	0.03685	0.03133	0.26546
647670.61	4196939.7	647670.61_4196939.7	5.14768	0.20754	0.08687	0.04439	0.03661	0.03151	0.26238
647690.61	4196939.7	647690.61_4196939.7	4.82719	0.20846	0.08671	0.04422	0.03639	0.03167	0.25941
647710.61	4196939.7	647710.61_4196939.7	4.53562	0.20952	0.0866	0.04409	0.03617	0.0318	0.25655
647330.61	4196959.7	647330.61_4196959.7	34.92854	0.2229	0.09534	0.04824	0.04091	0.02781	0.30377
647350.61	4196959.7	647350.61_4196959.7	30.56971	0.21942	0.09436	0.04786	0.04064	0.02797	0.30114
647370.61	4196959.7	647370.61_4196959.7	25.39149	0.21641	0.0935	0.04745	0.04039	0.02815	0.29868
647390.61	4196959.7	647390.61_4196959.7	20.83292	0.21334	0.09258	0.04717	0.04008	0.02831	0.2958
647410.61	4196959.7	647410.61_4196959.7	17.5817	0.21072	0.09176	0.04688	0.0398	0.02848	0.29306
647430.61	4196959.7	647430.61_4196959.7	15.14735	0.20844	0.09102	0.04655	0.03952	0.02867	0.29035
647450.61	4196959.7	647450.61_4196959.7	13.31187	0.20657	0.09036	0.04624	0.03926	0.02888	0.28777
647470.61	4196959.7	647470.61_4196959.7	11.73406	0.20478	0.08968	0.046	0.03896	0.02907	0.28491
647490.61	4196959.7	647490.61_4196959.7	10.4844	0.20335	0.08907	0.04575	0.03868	0.02929	0.28213
647510.61	4196959.7	647510.61_4196959.7	9.45536	0.20219	0.08852	0.04552	0.0384	0.02951	0.27937
647530.61	4196959.7	647530.61_4196959.7	8.58615	0.20135	0.08801	0.0453	0.03813	0.02975	0.27654
647550.61	4196959.7	647550.61_4196959.7	7.84782	0.20074	0.08755	0.04511	0.03786	0.02999	0.27367
647570.61	4196959.7	647570.61_4196959.7	7.21086	0.20036	0.08711	0.0449	0.03759	0.03023	0.27072
647590.61	4196959.7	647590.61_4196959.7	6.66128	0.20024	0.08672	0.04474	0.03733	0.03046	0.26774
647610.61	4196959.7	647610.61_4196959.7	6.17956	0.20035	0.08637	0.04453	0.03707	0.0307	0.26471
647630.61	4196959.7	647630.61_4196959.7	5.75273	0.20067	0.08606	0.04438	0.03683	0.03092	0.26166
647650.61	4196959.7	647650.61_4196959.7	5.37468	0.20122	0.08581	0.04422	0.03659	0.03114	0.25866
647670.61	4196959.7	647670.61_4196959.7	5.03267	0.20193	0.0856	0.04406	0.03636	0.03133	0.25569
647690.61	4196959.7	647690.61_4196959.7	4.72057	0.2028	0.08544	0.04389	0.03614	0.03149	0.25278
647710.61	4196959.7	647710.61_4196959.7	4.43733	0.2038	0.08532	0.04373	0.03593	0.03163	0.25002
647330.61	4196979.7	647330.61_4196979.7	35.08383	0.21806	0.09408	0.04787	0.04063	0.02765	0.29571
647350.61	4196979.7	647350.61_4196979.7	30.67433	0.21467	0.09312	0.04751	0.04036	0.02781	0.29321
647370.61	4196979.7	647370.61_4196979.7	25.41803	0.21171	0.09227	0.04709	0.04011	0.02799	0.29088
647390.61	4196979.7	647390.61_4196979.7	20.80456	0.20872	0.09137	0.0468	0.03981	0.02815	0.28815
647410.61	4196979.7	647410.61_4196979.7	17.51071	0.20611	0.09056	0.04652	0.03953	0.02832	0.28553
647430.61	4196979.7	647430.61_4196979.7	15.05067	0.20386	0.08982	0.04619	0.03925	0.02851	0.28295
647450.61	4196979.7	647450.61_4196979.7	13.19765	0.20199	0.08917	0.04588	0.039	0.02872	0.2805
647470.61	4196979.7	647470.61_4196979.7	11.6591	0.20029	0.08853	0.0456	0.03872	0.02893	0.27788
647490.61	4196979.7	647490.61_4196979.7	10.40099	0.19884	0.08793	0.04536	0.03844	0.02915	0.27523
647510.61	4196979.7	647510.61_4196979.7	9.35391	0.19766	0.08737	0.04512	0.03816	0.02937	0.27252
647530.61	4196979.7	647530.61_4196979.7	8.4732	0.19669	0.08686	0.04493	0.03789	0.0296	0.26975
647550.61	4196979.7	647550.61_4196979.7	7.72757	0.19599	0.08638	0.04473	0.03761	0.02983	0.26692
647570.61	4196979.7	647570.61_4196979.7	7.09198	0.19554	0.08594	0.04454	0.03735	0.03007	0.26406
647590.61	4196979.7	647590.61_4196979.7	6.54127	0.19532	0.08554	0.04437	0.03708	0.0303	0.26113
647610.61	4196979.7	647610.61_4196979.7	6.06385	0.19535	0.08519	0.04419	0.03683	0.03053	0.25819
647630.61	4196979.7	647630.61_4196979.7	5.63828	0.19558	0.08487	0.04402	0.03658	0.03075	0.25519
647650.61	4196979.7	647650.61_4196979.7	5.26335	0.19602	0.08461	0.04386	0.03635	0.03096	0.25225
647670.61	4196979.7	647670.61_4196979.7	4.92551	0.19665	0.08439	0.04371	0.03612	0.03115	0.24933
647690.61	4196979.7	647690.61_4196979.7	4.61534	0.1974	0.0842	0.04356	0.03589	0.03131	0.24645
647330.61	4196999.7	647330.61_4196999.7	34.90997	0.21341	0.09287	0.0475	0.04035	0.0275	0.288
647350.61	4196999.7	647350.61_4196999.7	30.76852	0.21009	0.09192	0.04715	0.04008	0.02765	0.28562
647370.61	4196999.7	647370.61_4196999.7	25.42385	0.20718	0.09107	0.04672	0.03984	0.02784	0.28341
647390.61	4196999.7	647390.61_4196999.7	20.74345	0.20425	0.09018	0.04645	0.03954	0.02799	0.2808
647410.61	4196999.7	647410.61_4196999.7	17.41084	0.2017	0.08938	0.04615	0.03926	0.02816	0.27832
647430.61	4196999.7	647430.61_4196999.7	14.93312	0.19947	0.08865	0.04584	0.03899	0.02835	0.27587
647450.61	4196999.7	647450.61_4196999.7	13.06913	0.19762	0.08802	0.04551	0.03874	0.02857	0.27352
647470.61	4196999.7	647470.61_4196999.7	11.47702	0.19581	0.08735	0.04528	0.03844	0.02876	0.27089
647490.61	4196999.7	647490.61_4196999.7	10.23328	0.19437	0.08676	0.04503	0.03817	0.02897	0.26836
647510.61	4196999.7	647510.61_4196999.7	9.21623	0.19318	0.08622	0.04477	0.03791	0.02921	0.26583
647530.61	4196999.7	647530.61_4196999.7	8.36919	0.1923	0.08574	0.04454	0.03766	0.02945	0.26328
647550.61	4196999.7	647550.61_4196999.7	7.62461	0.19154	0.08526	0.04434	0.03738	0.02969	0.26055
647570.61	4196999.7	647570.61_4196999.7	6.99175	0.19103	0.08483	0.04416	0.03712	0.02993	0.25777
647590.61	4196999.7	647590.61_4196999.7	6.44147	0.19075	0.08443	0.04399	0.03686	0.03016	0.25493
647610.61	4196999.7	647610.61_4196999.7	5.9584	0.19066	0.08406	0.04383	0.0366	0.03038	0.252
647630.61	4196999.7	647630.61_4196999.7	5.5328	0.19077	0.08373	0.04366	0.03635	0.0306	0.24906
647650.61	4196999.7	647650.61_4196999.7	5.15601	0.1911	0.08345	0.04351	0.03611	0.0308	0.24613
647670.61	4196999.7	647670.61_4196999.7	4.81691	0.19158	0.08321	0.04338	0.03587	0.03098	0.24324
647690.61	4196999.7	647690.61_4196999.7	4.51153	0.19224	0.083	0.04323	0.03565	0.03113	0.24041
647330.61	4197019.7	647330.61_4197019.7	34.82311	0.20892	0.09167	0.04714	0.04007	0.02734	0.28062
647350.61	4197019.7	647350.61_4197019.7	30.82632	0.20568	0.09073	0.04679	0.03981	0.0275	0.27836
647370.61	4197019.7	647370.61_4197019.7	25.37679	0.20283	0.08989	0.04637	0.03957	0.02768	0.27626
647390.61	4197019.7	647390.61_4197019.7	20.63081	0.19996	0.08902	0.04609	0.03927	0.02783	0.27379
647410.61	4197019.7	647410.61_4197019.7	17.25489	0.19745	0.08824	0.04579	0.039	0.02801	0.27141
647430.61	4197019.7	647430.61_4197019.7	14.76257	0.19525	0.08751	0.04549	0.03873	0.0282	0.26907
647450.61	4197019.7	647450.61_4197019.7	12.91159	0.19341	0.08689	0.04515	0.03849	0.02841	0.26685
647470.61	4197019.7	647470.61_4197019.7	11.31265	0.19159	0.08622	0.04494	0.03819	0.0286	0.26428
647490.61	4197019.7	647490.61_4197019.7	10.07196	0.19011	0.08562	0.04469	0.03792	0.02881	0.26183
647510.61	4197019.7	647510.61_4197019.7	9.0594	0.18889	0.08508	0.04443	0.03765	0.02904	0.25937
647530.61	4197019.7	647530.61_4197019.7	8.23514	0.18797	0.08462	0.0442	0.03741	0.0293	0.25696
647550.61	4197019.7	647550.61_4197019.7	7.47713	0.18711	0.08412	0.04402	0.03712	0.02951	0.2542
647570.61	4197019.7	647570.61_4197019.7	6.852	0.18655	0.08369	0.04384	0.03686	0.02975	0.25152
647590.61	4197019.7	647590.61_4197019.7	6.31504	0.18621	0.0833	0.04365	0.03661	0.02999	0.24879

647610.61	4197019.7	647610.61_4197019.7	5.84722	0.18612	0.08295	0.04349	0.03637	0.03022	0.24603
647630.61	4197019.7	647630.61_4197019.7	5.43244	0.18623	0.08263	0.04328	0.03613	0.03045	0.24323
647650.61	4197019.7	647650.61_4197019.7	5.06168	0.1865	0.08235	0.04312	0.0359	0.03066	0.24041
647670.61	4197019.7	647670.61_4197019.7	4.72429	0.18691	0.0821	0.04299	0.03566	0.03084	0.23757
647690.61	4197019.7	647690.61_4197019.7	4.42009	0.18748	0.08189	0.04285	0.03544	0.03099	0.23479
647350.61	4197039.7	647350.61_4197039.7	30.8403	0.20144	0.08958	0.04643	0.03954	0.02735	0.27142
647370.61	4197039.7	647370.61_4197039.7	25.18985	0.19865	0.08876	0.04602	0.0393	0.02753	0.2694
647390.61	4197039.7	647390.61_4197039.7	20.40396	0.19585	0.0879	0.04573	0.03901	0.02768	0.26707
647410.61	4197039.7	647410.61_4197039.7	17.00049	0.19336	0.08712	0.04544	0.03874	0.02785	0.26478
647430.61	4197039.7	647430.61_4197039.7	14.54927	0.19118	0.08641	0.04514	0.03848	0.02804	0.26257
647450.61	4197039.7	647450.61_4197039.7	12.71556	0.18935	0.08578	0.04481	0.03823	0.02826	0.26044
647470.61	4197039.7	647470.61_4197039.7	11.13489	0.18752	0.08512	0.04459	0.03794	0.02845	0.25797
647490.61	4197039.7	647490.61_4197039.7	9.90696	0.18603	0.08453	0.04435	0.03767	0.02866	0.25559
647510.61	4197039.7	647510.61_4197039.7	8.90785	0.18479	0.08399	0.0441	0.0374	0.02888	0.25321
647530.61	4197039.7	647530.61_4197039.7	8.08521	0.18383	0.08352	0.04388	0.03716	0.02913	0.25085
647550.61	4197039.7	647550.61_4197039.7	7.3643	0.18302	0.08306	0.04365	0.03689	0.02937	0.24831
647570.61	4197039.7	647570.61_4197039.7	6.72328	0.1823	0.0826	0.04352	0.03662	0.02959	0.24559
647590.61	4197039.7	647590.61_4197039.7	6.18929	0.18194	0.0822	0.04331	0.03637	0.02982	0.24293
647610.61	4197039.7	647610.61_4197039.7	5.72385	0.18176	0.08184	0.04316	0.03612	0.03006	0.24024
647630.61	4197039.7	647630.61_4197039.7	5.30995	0.18177	0.08152	0.04296	0.03588	0.03028	0.23749
647650.61	4197039.7	647650.61_4197039.7	4.94946	0.18204	0.08125	0.04278	0.03567	0.0305	0.23479
647670.61	4197039.7	647670.61_4197039.7	4.60575	0.18226	0.08097	0.04268	0.03542	0.03065	0.23192
647350.61	4197059.7	647350.61_4197059.7	30.5377	0.19736	0.08846	0.04608	0.03928	0.0272	0.26476
647370.61	4197059.7	647370.61_4197059.7	24.7272	0.19462	0.08764	0.04569	0.03904	0.02738	0.26284
647390.61	4197059.7	647390.61_4197059.7	20.00754	0.19189	0.08681	0.04538	0.03876	0.02753	0.26064
647410.61	4197059.7	647410.61_4197059.7	16.6707	0.18944	0.08603	0.04509	0.03849	0.0277	0.25845
647430.61	4197059.7	647430.61_4197059.7	14.27165	0.18729	0.08533	0.0448	0.03823	0.02789	0.25632
647450.61	4197059.7	647450.61_4197059.7	12.47248	0.18544	0.0847	0.04447	0.03798	0.02811	0.25425
647470.61	4197059.7	647470.61_4197059.7	10.9655	0.18368	0.08407	0.04423	0.0377	0.0283	0.25197
647490.61	4197059.7	647490.61_4197059.7	9.74022	0.18214	0.08347	0.044	0.03742	0.02851	0.24962
647510.61	4197059.7	647510.61_4197059.7	8.75319	0.18088	0.08293	0.04376	0.03716	0.02873	0.24731
647530.61	4197059.7	647530.61_4197059.7	7.92301	0.17982	0.08243	0.04354	0.0369	0.02896	0.24494
647550.61	4197059.7	647550.61_4197059.7	7.23292	0.17904	0.082	0.0433	0.03666	0.02922	0.24259
647570.61	4197059.7	647570.61_4197059.7	6.60146	0.17832	0.08154	0.04316	0.03639	0.02944	0.23997
647590.61	4197059.7	647590.61_4197059.7	6.06417	0.17784	0.08114	0.04298	0.03613	0.02966	0.23734
647610.61	4197059.7	647610.61_4197059.7	5.59922	0.1776	0.08078	0.04282	0.03589	0.0299	0.23471
647630.61	4197059.7	647630.61_4197059.7	5.1891	0.17755	0.08045	0.04263	0.03565	0.03012	0.23203
647650.61	4197059.7	647650.61_4197059.7	4.83147	0.17772	0.08019	0.04245	0.03544	0.03034	0.22939
647670.61	4197059.7	647670.61_4197059.7	4.4925	0.17791	0.0799	0.04234	0.03519	0.03049	0.22659
647350.61	4197079.7	647350.61_4197079.7	29.74854	0.19344	0.08738	0.04572	0.03902	0.02705	0.25839
647370.61	4197079.7	647370.61_4197079.7	23.95259	0.19074	0.08656	0.04535	0.03878	0.02723	0.25654
647390.61	4197079.7	647390.61_4197079.7	19.44494	0.18807	0.08573	0.04504	0.0385	0.02738	0.25446
647410.61	4197079.7	647410.61_4197079.7	16.24117	0.18564	0.08496	0.04475	0.03823	0.02755	0.25234
647430.61	4197079.7	647430.61_4197079.7	13.96582	0.18354	0.08427	0.04447	0.03798	0.02774	0.25033
647450.61	4197079.7	647450.61_4197079.7	12.21719	0.18168	0.08364	0.04414	0.03773	0.02795	0.24831
647470.61	4197079.7	647470.61_4197079.7	10.79786	0.18002	0.08305	0.04387	0.03747	0.02816	0.24622
647490.61	4197079.7	647490.61_4197079.7	9.57427	0.17842	0.08243	0.04365	0.03719	0.02836	0.2439
647510.61	4197079.7	647510.61_4197079.7	8.59636	0.17713	0.08189	0.04343	0.03692	0.02858	0.24164
647530.61	4197079.7	647530.61_4197079.7	7.77218	0.17601	0.08139	0.0432	0.03666	0.02881	0.23933
647550.61	4197079.7	647550.61_4197079.7	7.07292	0.17514	0.08094	0.04301	0.03641	0.02905	0.23697
647570.61	4197079.7	647570.61_4197079.7	6.47794	0.17451	0.08053	0.0428	0.03617	0.0293	0.23459
647590.61	4197079.7	647590.61_4197079.7	5.93051	0.17394	0.08011	0.04265	0.0359	0.02951	0.23197
647610.61	4197079.7	647610.61_4197079.7	5.46425	0.17361	0.07974	0.04249	0.03566	0.02973	0.22937
647630.61	4197079.7	647630.61_4197079.7	5.05865	0.17349	0.07942	0.04232	0.03542	0.02996	0.22676
647650.61	4197079.7	647650.61_4197079.7	4.70342	0.17362	0.07913	0.04213	0.0352	0.03017	0.22418
647670.61	4197079.7	647670.61_4197079.7	4.37937	0.1738	0.07886	0.04198	0.03498	0.03035	0.22153
647690.61	4197079.7	647690.61_4197079.7	4.0821	0.17407	0.0786	0.04188	0.03474	0.03048	0.21884
647350.61	4197099.7	647350.61_4197099.7	28.49238	0.18965	0.0863	0.04538	0.03876	0.02691	0.25227
647370.61	4197099.7	647370.61_4197099.7	22.98181	0.18698	0.0855	0.04502	0.03852	0.02708	0.25049
647390.61	4197099.7	647390.61_4197099.7	18.84136	0.1844	0.08469	0.04469	0.03826	0.02724	0.24854
647410.61	4197099.7	647410.61_4197099.7	15.86391	0.18203	0.08394	0.0444	0.03799	0.02741	0.24655
647430.61	4197099.7	647430.61_4197099.7	13.75569	0.18003	0.08328	0.04408	0.03776	0.02762	0.24471
647490.61	4197099.7	647490.61_4197099.7	9.43733	0.17488	0.08144	0.04329	0.03697	0.02823	0.23847
647510.61	4197099.7	647510.61_4197099.7	8.43544	0.17349	0.08087	0.0431	0.03668	0.02843	0.23617
647530.61	4197099.7	647530.61_4197099.7	7.61999	0.17237	0.08037	0.04286	0.03643	0.02865	0.23394
647550.61	4197099.7	647550.61_4197099.7	6.92114	0.17146	0.07992	0.04269	0.03617	0.02889	0.23164
647570.61	4197099.7	647570.61_4197099.7	6.3264	0.17079	0.07951	0.04247	0.03593	0.02914	0.22932
647590.61	4197099.7	647590.61_4197099.7	5.79509	0.17021	0.07911	0.04231	0.03568	0.02936	0.22685
647610.61	4197099.7	647610.61_4197099.7	5.32171	0.1698	0.07873	0.04216	0.03543	0.02958	0.22424
647630.61	4197099.7	647630.61_4197099.7	4.91914	0.16962	0.07839	0.04201	0.03519	0.0298	0.2217
647650.61	4197099.7	647650.61_4197099.7	4.56611	0.16963	0.0781	0.04182	0.03497	0.03	0.21915
647670.61	4197099.7	647670.61_4197099.7	4.25134	0.16981	0.07783	0.04166	0.03475	0.03019	0.2166
647690.61	4197099.7	647690.61_4197099.7	3.9614	0.17	0.07758	0.04155	0.03452	0.03032	0.21397
647350.61	4197119.7	647350.61_4197119.7	27.10646	0.18597	0.08525	0.04504	0.03851	0.02676	0.24638
647370.61	4197119.7	647370.61_4197119.7	22.06762	0.18337	0.08446	0.04468	0.03827	0.02693	0.24469
647390.61	4197119.7	647390.61_4197119.7	18.37031	0.18091	0.08369	0.04433	0.03802	0.02711	0.2429
647510.61	4197119.7	647510.61_4197119.7	8.28956	0.17004	0.0799	0.04276	0.03646	0.02828	0.23096
647530.61	4197119.7	647530.61_4197119.7	7.46178	0.16888	0.07938	0.04255	0.03619	0.0285	0.22875
647550.61	4197119.7	647550.61_4197119.7	6.76102	0.16793	0.07893	0.04238	0.03594	0.02874	0.22651
647570.61	4197119.7	647570.61_4197119.7	6.15589	0.16716	0.07851	0.04217	0.03569	0.02897	0.2242
647590.61	4197119.7	647590.61_4197119.7	5.64674	0.16666	0.07814	0.04197	0.03546	0.02922	0.22191

647610.61	4197119.7	647610.61_4197119.7	5.17435	0.16617	0.07775	0.04181	0.03521	0.02943	0.21936
647630.61	4197119.7	647630.61_4197119.7	4.77463	0.16594	0.07741	0.04168	0.03497	0.02964	0.21686
647650.61	4197119.7	647650.61_4197119.7	4.42089	0.16585	0.0771	0.04151	0.03474	0.02984	0.21432
647670.61	4197119.7	647670.61_4197119.7	4.10928	0.1659	0.07682	0.04136	0.03452	0.03001	0.21178
647690.61	4197119.7	647690.61_4197119.7	3.83532	0.16615	0.07658	0.04123	0.0343	0.03016	0.20929
647530.61	4197139.7	647530.61_4197139.7	7.29835	0.16553	0.07842	0.04223	0.03597	0.02836	0.22377
647550.61	4197139.7	647550.61_4197139.7	6.59147	0.16454	0.07796	0.04205	0.03571	0.02859	0.22159
647570.61	4197139.7	647570.61_4197139.7	5.98652	0.16375	0.07754	0.04184	0.03546	0.02882	0.21935
647590.61	4197139.7	647590.61_4197139.7	5.47363	0.16317	0.07717	0.04166	0.03523	0.02906	0.21708
647610.61	4197139.7	647610.61_4197139.7	5.01856	0.16272	0.0768	0.04148	0.03499	0.02929	0.21469
647630.61	4197139.7	647630.61_4197139.7	4.61913	0.1624	0.07646	0.04136	0.03475	0.02949	0.21221
647650.61	4197139.7	647650.61_4197139.7	4.27449	0.16224	0.07615	0.04119	0.03453	0.02969	0.20973
647670.61	4197139.7	647670.61_4197139.7	3.97366	0.16231	0.07587	0.04103	0.03431	0.02987	0.20728
647690.61	4197139.7	647690.61_4197139.7	3.7073	0.16247	0.07562	0.04089	0.0341	0.03002	0.20484
647530.61	4197159.7	647530.61_4197159.7	7.13023	0.16232	0.0775	0.0419	0.03575	0.02822	0.21902
647550.61	4197159.7	647550.61_4197159.7	6.40479	0.16129	0.07703	0.04171	0.03549	0.02844	0.21685
647570.61	4197159.7	647570.61_4197159.7	5.80006	0.16047	0.07661	0.04151	0.03524	0.02868	0.21467
647590.61	4197159.7	647590.61_4197159.7	5.28761	0.15986	0.07623	0.04135	0.03501	0.02891	0.21245
647610.61	4197159.7	647610.61_4197159.7	4.84688	0.15938	0.07587	0.04116	0.03478	0.02915	0.21016
647630.61	4197159.7	647630.61_4197159.7	4.45683	0.15903	0.07553	0.04103	0.03455	0.02935	0.20775
647650.61	4197159.7	647650.61_4197159.7	4.117	0.15882	0.0752	0.04088	0.03431	0.02954	0.2053
647670.61	4197159.7	647670.61_4197159.7	3.82081	0.15874	0.0749	0.04074	0.03409	0.0297	0.20285
647690.61	4197159.7	647690.61_4197159.7	3.57012	0.15893	0.07467	0.04057	0.03389	0.02986	0.20052
647550.61	4197179.7	647550.61_4197179.7	6.20321	0.1582	0.07612	0.04137	0.03528	0.02831	0.21232
647570.61	4197179.7	647570.61_4197179.7	5.60082	0.15737	0.0757	0.04119	0.03503	0.02854	0.21021
647590.61	4197179.7	647590.61_4197179.7	5.08536	0.15666	0.07531	0.04103	0.03479	0.02876	0.20799
647610.61	4197179.7	647610.61_4197179.7	4.65238	0.15616	0.07495	0.04086	0.03456	0.02899	0.20574
647630.61	4197179.7	647630.61_4197179.7	4.2728	0.15575	0.0746	0.04072	0.03432	0.02919	0.20337
647650.61	4197179.7	647650.61_4197179.7	3.94211	0.15544	0.07427	0.0406	0.03408	0.02937	0.20094
647670.61	4197179.7	647670.61_4197179.7	3.66396	0.15537	0.07398	0.04043	0.03387	0.02954	0.1986
647690.61	4197179.7	647690.61_4197179.7	3.42302	0.15547	0.07373	0.04027	0.03367	0.0297	0.19631
647550.61	4197199.7	647550.61_4197199.7	5.96183	0.15518	0.07521	0.04105	0.03506	0.02817	0.20791
647570.61	4197199.7	647570.61_4197199.7	5.35562	0.15426	0.07478	0.04092	0.0348	0.02838	0.20579
647590.61	4197199.7	647590.61_4197199.7	4.85204	0.15352	0.07438	0.04075	0.03456	0.0286	0.2036
647610.61	4197199.7	647610.61_4197199.7	4.44665	0.15303	0.07405	0.04056	0.03435	0.02884	0.20149
647630.61	4197199.7	647630.61_4197199.7	4.0871	0.15262	0.07371	0.04039	0.03412	0.02905	0.19922
647650.61	4197199.7	647650.61_4197199.7	3.76768	0.15226	0.07337	0.04029	0.03387	0.02922	0.19682
647670.61	4197199.7	647670.61_4197199.7	3.50305	0.15214	0.07309	0.04013	0.03366	0.02939	0.19453
647690.61	4197199.7	647690.61_4197199.7	3.27044	0.15215	0.07282	0.03998	0.03345	0.02954	0.19225
647490.61	4197219.7	647490.61_4197219.7	8.292	0.15566	0.07574	0.04145	0.03555	0.02733	0.20912
647510.61	4197219.7	647510.61_4197219.7	7.22703	0.15436	0.07523	0.04121	0.03531	0.02755	0.20735
647530.61	4197219.7	647530.61_4197219.7	6.38176	0.15324	0.07477	0.04098	0.03508	0.02779	0.20555
647550.61	4197219.7	647550.61_4197219.7	5.68663	0.15226	0.07434	0.04075	0.03484	0.02803	0.20365
647570.61	4197219.7	647570.61_4197219.7	5.09553	0.15132	0.0739	0.04062	0.03459	0.02823	0.20157
647590.61	4197219.7	647590.61_4197219.7	4.6148	0.15057	0.07351	0.04044	0.03434	0.02845	0.19946
647610.61	4197219.7	647610.61_4197219.7	4.21872	0.15	0.07316	0.04028	0.03412	0.02868	0.19733
647630.61	4197219.7	647630.61_4197219.7	3.89004	0.14962	0.07284	0.04007	0.03391	0.02891	0.19521
647650.61	4197219.7	647650.61_4197219.7	3.58714	0.14923	0.0725	0.03999	0.03367	0.02908	0.19286
647670.61	4197219.7	647670.61_4197219.7	3.33542	0.14905	0.07221	0.03983	0.03345	0.02924	0.1906
647690.61	4197219.7	647690.61_4197219.7	3.11668	0.149	0.07194	0.03968	0.03325	0.02939	0.18836
647710.61	4197219.7	647710.61_4197219.7	2.92904	0.14915	0.07172	0.03953	0.03306	0.02952	0.18623
647430.61	4197239.7	647430.61_4197239.7	13.43239	0.15766	0.07657	0.04189	0.03607	0.02659	0.20963
647450.61	4197239.7	647450.61_4197239.7	11.09617	0.15592	0.07596	0.04164	0.03582	0.02678	0.2081
647470.61	4197239.7	647470.61_4197239.7	9.31638	0.15434	0.0754	0.04136	0.03558	0.02699	0.20653
647490.61	4197239.7	647490.61_4197239.7	7.90212	0.15281	0.07484	0.04116	0.03532	0.02718	0.20477
647510.61	4197239.7	647510.61_4197239.7	6.85202	0.15153	0.07435	0.04091	0.03508	0.0274	0.20308
647530.61	4197239.7	647530.61_4197239.7	6.02519	0.1504	0.07389	0.04071	0.03485	0.02763	0.20132
647550.61	4197239.7	647550.61_4197239.7	5.37729	0.14945	0.07349	0.04045	0.03463	0.02789	0.19955
647570.61	4197239.7	647570.61_4197239.7	4.81194	0.1485	0.07304	0.04031	0.03437	0.02809	0.1975
647590.61	4197239.7	647590.61_4197239.7	4.36107	0.14774	0.07265	0.04013	0.03414	0.02831	0.19546
647610.61	4197239.7	647610.61_4197239.7	3.9853	0.14711	0.07229	0.03998	0.03391	0.02853	0.19336
647630.61	4197239.7	647630.61_4197239.7	3.67962	0.14671	0.07198	0.03978	0.0337	0.02876	0.1913
647650.61	4197239.7	647650.61_4197239.7	3.40207	0.14633	0.07165	0.03968	0.03347	0.02894	0.18906
647670.61	4197239.7	647670.61_4197239.7	3.16733	0.1461	0.07137	0.03952	0.03326	0.02911	0.18685
647690.61	4197239.7	647690.61_4197239.7	2.9634	0.14601	0.0711	0.03937	0.03305	0.02925	0.18467
647710.61	4197239.7	647710.61_4197239.7	2.78201	0.14604	0.07085	0.03924	0.03285	0.02936	0.18249
647350.61	4197259.7	647350.61_4197259.7	30.85051	0.16323	0.07846	0.04282	0.03677	0.02576	0.21067
647370.61	4197259.7	647370.61_4197259.7	26.11457	0.16089	0.0777	0.04253	0.03653	0.02591	0.20935
647390.61	4197259.7	647390.61_4197259.7	21.10802	0.15882	0.07702	0.04219	0.03632	0.02609	0.20813
647410.61	4197259.7	647410.61_4197259.7	16.48952	0.15673	0.07632	0.04191	0.03607	0.02625	0.20669
647430.61	4197259.7	647430.61_4197259.7	13.06765	0.15483	0.07568	0.04161	0.03583	0.02643	0.20525
647450.61	4197259.7	647450.61_4197259.7	10.59407	0.15312	0.07509	0.04135	0.03559	0.02663	0.20381
647470.61	4197259.7	647470.61_4197259.7	8.8125	0.15162	0.07455	0.04106	0.03537	0.02685	0.20235
647490.61	4197259.7	647490.61_4197259.7	7.41754	0.1501	0.07399	0.04086	0.0351	0.02704	0.20065
647510.61	4197259.7	647510.61_4197259.7	6.39744	0.14879	0.07348	0.04063	0.03486	0.02726	0.19896
647530.61	4197259.7	647530.61_4197259.7	5.62186	0.14765	0.07303	0.04043	0.03463	0.02749	0.19725
647550.61	4197259.7	647550.61_4197259.7	5.02321	0.14672	0.07264	0.04018	0.03441	0.02774	0.19554
647570.61	4197259.7	647570.61_4197259.7	4.50806	0.14578	0.0722	0.04	0.03416	0.02795	0.19359
647590.61	4197259.7	647590.61_4197259.7	4.0902	0.14499	0.07181	0.03983	0.03393	0.02817	0.19159
647610.61	4197259.7	647610.61_4197259.7	3.74921	0.14438	0.07147	0.03967	0.03371	0.0284	0.18958
647630.61	4197259.7	647630.61_4197259.7	3.46163	0.1439	0.07115	0.03949	0.0335	0.02862	0.18752

647650.61	4197259.7	647650.61_4197259.7	3.20921	0.14351	0.07083	0.03937	0.03327	0.0288	0.18537
647670.61	4197259.7	647670.61_4197259.7	2.98795	0.14321	0.07052	0.03924	0.03305	0.02895	0.18316
647690.61	4197259.7	647690.61_4197259.7	2.79616	0.14304	0.07024	0.03911	0.03283	0.02908	0.18096
647710.61	4197259.7	647710.61_4197259.7	2.63021	0.14302	0.06998	0.03898	0.03263	0.02919	0.17884
647370.61	4197279.7	647370.61_4197279.7	27.10771	0.15808	0.07681	0.04224	0.0363	0.02577	0.205
647390.61	4197279.7	647390.61_4197279.7	21.11798	0.15601	0.07613	0.04191	0.03608	0.02594	0.20381
647410.61	4197279.7	647410.61_4197279.7	15.94163	0.15402	0.07546	0.0416	0.03584	0.02612	0.20248
647430.61	4197279.7	647430.61_4197279.7	12.20285	0.15212	0.07481	0.04132	0.0356	0.02629	0.20107
647450.61	4197279.7	647450.61_4197279.7	9.73634	0.15043	0.07423	0.04106	0.03536	0.02649	0.19966
647470.61	4197279.7	647470.61_4197279.7	8.07036	0.14895	0.0737	0.04078	0.03514	0.02671	0.19828
647490.61	4197279.7	647490.61_4197279.7	6.81179	0.1475	0.07316	0.04055	0.0349	0.02691	0.1967
647510.61	4197279.7	647510.61_4197279.7	5.86886	0.14614	0.07264	0.04034	0.03464	0.02711	0.195
647530.61	4197279.7	647530.61_4197279.7	5.18016	0.14503	0.0722	0.04013	0.03441	0.02735	0.19336
647550.61	4197279.7	647550.61_4197279.7	4.63523	0.14405	0.07179	0.0399	0.03419	0.02759	0.19166
647570.61	4197279.7	647570.61_4197279.7	4.18696	0.14317	0.07139	0.03968	0.03397	0.02783	0.18983
647590.61	4197279.7	647590.61_4197279.7	3.81231	0.14239	0.071	0.03952	0.03373	0.02805	0.1879
647610.61	4197279.7	647610.61_4197279.7	3.49679	0.14171	0.07064	0.03939	0.0335	0.02826	0.18588
647630.61	4197279.7	647630.61_4197279.7	3.22898	0.14113	0.0703	0.03924	0.03327	0.02845	0.18379
647650.61	4197279.7	647650.61_4197279.7	3.00107	0.14071	0.06998	0.03909	0.03305	0.02863	0.18168
647670.61	4197279.7	647670.61_4197279.7	2.80488	0.1404	0.06969	0.03897	0.03284	0.02879	0.17956
647690.61	4197279.7	647690.61_4197279.7	2.63279	0.14021	0.0694	0.03884	0.03263	0.02893	0.17744
647710.61	4197279.7	647710.61_4197279.7	2.48195	0.14014	0.06915	0.03869	0.03243	0.02903	0.17536
647730.61	4197279.7	647730.61_4197279.7	2.34884	0.14022	0.06893	0.03857	0.03224	0.02911	0.17334
647370.61	4197299.7	647370.61_4197299.7	26.89994	0.15538	0.07595	0.04193	0.03607	0.02564	0.20084
647390.61	4197299.7	647390.61_4197299.7	19.48152	0.15328	0.07526	0.04163	0.03584	0.0258	0.19962
647410.61	4197299.7	647410.61_4197299.7	14.18897	0.1514	0.07463	0.04129	0.03562	0.02599	0.19844
647430.61	4197299.7	647430.61_4197299.7	10.66819	0.1495	0.07397	0.04104	0.03537	0.02615	0.19703
647450.61	4197299.7	647450.61_4197299.7	8.53898	0.14783	0.07339	0.04077	0.03514	0.02635	0.19569
647470.61	4197299.7	647470.61_4197299.7	7.11039	0.14634	0.07285	0.04051	0.03491	0.02656	0.1943
647490.61	4197299.7	647490.61_4197299.7	6.09613	0.14499	0.07236	0.04024	0.03469	0.02679	0.19287
647510.61	4197299.7	647510.61_4197299.7	5.30529	0.14367	0.07186	0.04003	0.03445	0.027	0.19127
647530.61	4197299.7	647530.61_4197299.7	4.71032	0.14254	0.07141	0.03981	0.03422	0.02723	0.18965
647550.61	4197299.7	647550.61_4197299.7	4.22649	0.14151	0.07098	0.03962	0.03398	0.02745	0.18792
647570.61	4197299.7	647570.61_4197299.7	3.82858	0.14056	0.07056	0.03942	0.03374	0.02766	0.18607
647590.61	4197299.7	647590.61_4197299.7	3.50186	0.13975	0.07017	0.03928	0.03351	0.02788	0.18417
647610.61	4197299.7	647610.61_4197299.7	3.23061	0.13908	0.06982	0.03912	0.03328	0.0281	0.18223
647630.61	4197299.7	647630.61_4197299.7	2.99973	0.13851	0.06949	0.03896	0.03306	0.0283	0.18024
647650.61	4197299.7	647650.61_4197299.7	2.79896	0.13807	0.06917	0.03881	0.03285	0.02848	0.17819
647670.61	4197299.7	647670.61_4197299.7	2.62411	0.13775	0.06888	0.0387	0.03264	0.02864	0.17612
647690.61	4197299.7	647690.61_4197299.7	2.47123	0.13753	0.06861	0.03855	0.03243	0.02878	0.17406
647710.61	4197299.7	647710.61_4197299.7	2.33621	0.13744	0.06835	0.03841	0.03224	0.02889	0.17203
647730.61	4197299.7	647730.61_4197299.7	2.21748	0.13748	0.06813	0.03827	0.03205	0.02897	0.17008
647750.61	4197299.7	647750.61_4197299.7	2.10957	0.13761	0.06794	0.03816	0.03187	0.02902	0.16817
647390.61	4197319.7	647390.61_4197319.7	14.95348	0.15068	0.07442	0.04134	0.03561	0.02566	0.19561
647410.61	4197319.7	647410.61_4197319.7	11.04397	0.14885	0.0738	0.041	0.0354	0.02585	0.19452
647430.61	4197319.7	647430.61_4197319.7	8.64595	0.14702	0.07316	0.04075	0.03516	0.02603	0.1932
647450.61	4197319.7	647450.61_4197319.7	7.14134	0.14539	0.0726	0.04047	0.03493	0.02623	0.19192
647470.61	4197319.7	647470.61_4197319.7	6.07898	0.14388	0.07206	0.04022	0.03471	0.02644	0.19056
647490.61	4197319.7	647490.61_4197319.7	5.28228	0.14248	0.07154	0.03996	0.03447	0.02664	0.18909
647510.61	4197319.7	647510.61_4197319.7	4.66538	0.14117	0.07104	0.03977	0.03423	0.02685	0.18753
647530.61	4197319.7	647530.61_4197319.7	4.18043	0.14001	0.07058	0.03955	0.03399	0.02707	0.1859
647550.61	4197319.7	647550.61_4197319.7	3.79278	0.13897	0.07015	0.03936	0.03376	0.02729	0.18422
647570.61	4197319.7	647570.61_4197319.7	3.4717	0.13806	0.06976	0.03915	0.03353	0.02752	0.18247
647590.61	4197319.7	647590.61_4197319.7	3.20176	0.13726	0.06938	0.039	0.0333	0.02774	0.18065
647610.61	4197319.7	647610.61_4197319.7	2.97059	0.13657	0.06903	0.03883	0.03308	0.02795	0.17876
647630.61	4197319.7	647630.61_4197319.7	2.77204	0.136	0.0687	0.03868	0.03286	0.02816	0.17682
647650.61	4197319.7	647650.61_4197319.7	2.59923	0.13553	0.06839	0.03852	0.03265	0.02834	0.17484
647670.61	4197319.7	647670.61_4197319.7	2.44765	0.13521	0.0681	0.03841	0.03245	0.02851	0.17284
647690.61	4197319.7	647690.61_4197319.7	2.3106	0.13493	0.06783	0.03827	0.03224	0.02863	0.17079
647710.61	4197319.7	647710.61_4197319.7	2.1906	0.13479	0.06757	0.03813	0.03204	0.02874	0.1688
647730.61	4197319.7	647730.61_4197319.7	2.08537	0.1348	0.06735	0.03799	0.03186	0.02883	0.16689
647750.61	4197319.7	647750.61_4197319.7	1.98915	0.13491	0.06715	0.03787	0.03168	0.02887	0.16503
647390.61	4197339.7	647390.61_4197339.7	8.76476	0.14818	0.07361	0.04105	0.03539	0.02553	0.19178
647410.61	4197339.7	647410.61_4197339.7	7.52645	0.14634	0.07298	0.04073	0.03517	0.02571	0.19068
647430.61	4197339.7	647430.61_4197339.7	6.50573	0.14462	0.07238	0.04045	0.03496	0.02591	0.18951
647450.61	4197339.7	647450.61_4197339.7	5.64606	0.14294	0.0718	0.04018	0.03472	0.02609	0.18819
647470.61	4197339.7	647470.61_4197339.7	4.96687	0.14138	0.07123	0.03997	0.03447	0.02628	0.18678
647490.61	4197339.7	647490.61_4197339.7	4.44481	0.14	0.07072	0.03971	0.03424	0.02649	0.18537
647510.61	4197339.7	647510.61_4197339.7	4.01997	0.13874	0.07024	0.0395	0.03401	0.0267	0.18389
647530.61	4197339.7	647530.61_4197339.7	3.66752	0.13759	0.06979	0.03927	0.03378	0.02693	0.18234
647550.61	4197339.7	647550.61_4197339.7	3.37526	0.13659	0.06937	0.03909	0.03355	0.02716	0.18073
647570.61	4197339.7	647570.61_4197339.7	3.12256	0.13567	0.06898	0.03888	0.03333	0.02738	0.17904
647590.61	4197339.7	647590.61_4197339.7	2.90455	0.13487	0.06861	0.03871	0.0331	0.0276	0.17726
647610.61	4197339.7	647610.61_4197339.7	2.71307	0.13417	0.06825	0.03855	0.03288	0.02781	0.17541
647630.61	4197339.7	647630.61_4197339.7	2.5467	0.13357	0.06793	0.0384	0.03266	0.02802	0.17351
647650.61	4197339.7	647650.61_4197339.7	2.40449	0.13312	0.06764	0.03823	0.03247	0.02821	0.17163
647670.61	4197339.7	647670.61_4197339.7	2.27445	0.13277	0.06736	0.0381	0.03226	0.02838	0.16968
647690.61	4197339.7	647690.61_4197339.7	2.15223	0.13243	0.06706	0.03799	0.03204	0.02849	0.16763
647710.61	4197339.7	647710.61_4197339.7	2.04732	0.13225	0.0668	0.03786	0.03185	0.0286	0.16568
647730.61	4197339.7	647730.61_4197339.7	1.95273	0.1322	0.06656	0.03772	0.03166	0.02867	0.16377
647750.61	4197339.7	647750.61_4197339.7	1.86959	0.1323	0.06637	0.03759	0.03149	0.02873	0.16197

647770.61	4197339.7	647770.61_4197339.7	1.7886	0.13238	0.06617	0.0375	0.0313	0.02871	0.16014
647390.61	4197359.7	647390.61_4197359.7	5.21389	0.14572	0.0728	0.04077	0.03517	0.0254	0.18804
647410.61	4197359.7	647410.61_4197359.7	4.97804	0.14387	0.07217	0.04047	0.03495	0.02557	0.18693
647430.61	4197359.7	647430.61_4197359.7	4.67368	0.14215	0.07156	0.0402	0.03472	0.02576	0.18578
647450.61	4197359.7	647450.61_4197359.7	4.32246	0.14051	0.07099	0.03992	0.03449	0.02594	0.18452
647470.61	4197359.7	647470.61_4197359.7	3.99006	0.13902	0.07045	0.0397	0.03426	0.02614	0.18321
647490.61	4197359.7	647490.61_4197359.7	3.68867	0.13766	0.06994	0.03944	0.03403	0.02635	0.18185
647510.61	4197359.7	647510.61_4197359.7	3.41788	0.13641	0.06946	0.03923	0.0338	0.02657	0.18041
647530.61	4197359.7	647530.61_4197359.7	3.17824	0.13527	0.06901	0.039	0.03357	0.02679	0.1789
647550.61	4197359.7	647550.61_4197359.7	2.96962	0.13428	0.06861	0.03882	0.03335	0.02702	0.17734
647570.61	4197359.7	647570.61_4197359.7	2.78646	0.13341	0.06823	0.0386	0.03313	0.02726	0.17574
647590.61	4197359.7	647590.61_4197359.7	2.6201	0.13261	0.06788	0.03841	0.03292	0.02748	0.17404
647610.61	4197359.7	647610.61_4197359.7	2.46105	0.13185	0.0675	0.03827	0.03268	0.02768	0.17216
647630.61	4197359.7	647630.61_4197359.7	2.32684	0.13126	0.06718	0.03813	0.03247	0.02788	0.17032
647650.61	4197359.7	647650.61_4197359.7	2.20627	0.13073	0.06688	0.03797	0.03226	0.02806	0.16843
647670.61	4197359.7	647670.61_4197359.7	2.1015	0.13039	0.06661	0.03781	0.03207	0.02824	0.16658
647690.61	4197359.7	647690.61_4197359.7	1.99801	0.13006	0.06631	0.03771	0.03186	0.02836	0.16459
647710.61	4197359.7	647710.61_4197359.7	1.90707	0.12984	0.06605	0.03759	0.03166	0.02845	0.16266
647730.61	4197359.7	647730.61_4197359.7	1.82507	0.12973	0.06582	0.03745	0.03147	0.02853	0.16079
647750.61	4197359.7	647750.61_4197359.7	1.75084	0.12975	0.0656	0.03733	0.03129	0.02857	0.15898
647770.61	4197359.7	647770.61_4197359.7	1.6836	0.12987	0.06543	0.03721	0.03113	0.02859	0.15727
647410.61	4197379.7	647410.61_4197379.7	3.65913	0.14153	0.07139	0.04019	0.03473	0.02544	0.18337
647430.61	4197379.7	647430.61_4197379.7	3.51466	0.1398	0.07078	0.03993	0.0345	0.02562	0.18222
647450.61	4197379.7	647450.61_4197379.7	3.36322	0.1382	0.07021	0.03965	0.03427	0.02581	0.18101
647470.61	4197379.7	647470.61_4197379.7	3.21168	0.13675	0.06969	0.03942	0.03405	0.02601	0.17979
647490.61	4197379.7	647490.61_4197379.7	3.05172	0.13541	0.06918	0.03916	0.03383	0.02622	0.17847
647510.61	4197379.7	647510.61_4197379.7	2.89391	0.13418	0.06872	0.03894	0.0336	0.02644	0.17709
647530.61	4197379.7	647530.61_4197379.7	2.73638	0.13304	0.06827	0.03873	0.03337	0.02666	0.17559
647550.61	4197379.7	647550.61_4197379.7	2.59604	0.13205	0.06787	0.03855	0.03315	0.02689	0.17408
647570.61	4197379.7	647570.61_4197379.7	2.46561	0.13115	0.06749	0.03833	0.03293	0.02712	0.1725
647590.61	4197379.7	647590.61_4197379.7	2.34405	0.13037	0.06714	0.03812	0.03272	0.02735	0.17086
647610.61	4197379.7	647610.61_4197379.7	2.22223	0.1296	0.06677	0.03799	0.03249	0.02755	0.16903
647630.61	4197379.7	647630.61_4197379.7	2.11532	0.12898	0.06644	0.03786	0.03228	0.02774	0.16722
647650.61	4197379.7	647650.61_4197379.7	2.01861	0.12847	0.06614	0.03769	0.03207	0.02792	0.16538
647670.61	4197379.7	647670.61_4197379.7	1.93208	0.12807	0.06587	0.03755	0.03188	0.0281	0.16355
647690.61	4197379.7	647690.61_4197379.7	1.84946	0.12776	0.06559	0.03742	0.03168	0.02823	0.16167
647710.61	4197379.7	647710.61_4197379.7	1.7704	0.12747	0.06533	0.03732	0.03147	0.02831	0.15973
647730.61	4197379.7	647730.61_4197379.7	1.70028	0.12732	0.06508	0.03719	0.03128	0.02838	0.15789
647750.61	4197379.7	647750.61_4197379.7	1.63529	0.12728	0.06485	0.03707	0.0311	0.02842	0.15609
647770.61	4197379.7	647770.61_4197379.7	1.57865	0.12742	0.06468	0.03694	0.03094	0.02844	0.15443
647410.61	4197399.7	647410.61_4197399.7	2.92176	0.13922	0.07061	0.03993	0.03451	0.02531	0.17986
647430.61	4197399.7	647430.61_4197399.7	2.83039	0.13755	0.07002	0.03965	0.03429	0.02549	0.1788
647450.61	4197399.7	647450.61_4197399.7	2.73018	0.13597	0.06945	0.03938	0.03406	0.02568	0.17763
647470.61	4197399.7	647470.61_4197399.7	2.64278	0.13455	0.06894	0.03914	0.03384	0.02588	0.17646
647490.61	4197399.7	647490.61_4197399.7	2.55722	0.13327	0.06846	0.03888	0.03363	0.0261	0.17524
647510.61	4197399.7	647510.61_4197399.7	2.46226	0.13205	0.068	0.03865	0.03341	0.02632	0.17389
647530.61	4197399.7	647530.61_4197399.7	2.35749	0.13087	0.06754	0.03846	0.03317	0.02653	0.1724
647550.61	4197399.7	647550.61_4197399.7	2.2618	0.12986	0.06712	0.03828	0.03294	0.02675	0.17088
647570.61	4197399.7	647570.61_4197399.7	2.17303	0.12897	0.06675	0.03807	0.03273	0.02698	0.16934
647590.61	4197399.7	647590.61_4197399.7	2.08957	0.1282	0.06641	0.03784	0.03253	0.02722	0.16777
647610.61	4197399.7	647610.61_4197399.7	1.99995	0.12744	0.06605	0.03771	0.0323	0.02742	0.16601
647630.61	4197399.7	647630.61_4197399.7	1.91636	0.12679	0.06572	0.03759	0.03209	0.02761	0.16421
647650.61	4197399.7	647650.61_4197399.7	1.84148	0.12626	0.06542	0.03742	0.03188	0.02779	0.16243
647670.61	4197399.7	647670.61_4197399.7	1.77041	0.12581	0.06514	0.03728	0.03168	0.02795	0.1606
647690.61	4197399.7	647690.61_4197399.7	1.70633	0.12551	0.06489	0.03714	0.0315	0.0281	0.15882
647710.61	4197399.7	647710.61_4197399.7	1.6398	0.12521	0.06461	0.03705	0.03129	0.02818	0.15691
647730.61	4197399.7	647730.61_4197399.7	1.58106	0.12504	0.06436	0.03692	0.0311	0.02824	0.1551
647750.61	4197399.7	647750.61_4197399.7	1.52757	0.125	0.06415	0.03678	0.03093	0.02829	0.15337
647390.61	4197419.7	647390.61_4197419.7	2.51646	0.13878	0.07048	0.03994	0.03452	0.02501	0.17754
647410.61	4197419.7	647410.61_4197419.7	2.4591	0.13707	0.06989	0.03965	0.03431	0.02519	0.17661
647430.61	4197419.7	647430.61_4197419.7	2.39654	0.13543	0.0693	0.03935	0.0341	0.02537	0.17557
647450.61	4197419.7	647450.61_4197419.7	2.31042	0.13381	0.06871	0.03912	0.03386	0.02555	0.17437
647470.61	4197419.7	647470.61_4197419.7	2.24084	0.13239	0.0682	0.03888	0.03364	0.02575	0.17321
647490.61	4197419.7	647490.61_4197419.7	2.17667	0.1311	0.06771	0.03863	0.03342	0.02596	0.172
647510.61	4197419.7	647510.61_4197419.7	2.11967	0.12995	0.06728	0.03837	0.03321	0.0262	0.17076
647530.61	4197419.7	647530.61_4197419.7	2.0467	0.12878	0.06682	0.0382	0.03297	0.0264	0.16929
647550.61	4197419.7	647550.61_4197419.7	1.98146	0.12776	0.0664	0.038	0.03275	0.02662	0.16781
647570.61	4197419.7	647570.61_4197419.7	1.92041	0.12687	0.06603	0.03781	0.03254	0.02685	0.1663
647590.61	4197419.7	647590.61_4197419.7	1.86023	0.12609	0.06569	0.03759	0.03233	0.02708	0.16474
647610.61	4197419.7	647610.61_4197419.7	1.79904	0.12537	0.06536	0.03744	0.03212	0.02729	0.16309
647630.61	4197419.7	647630.61_4197419.7	1.73389	0.12468	0.06501	0.03731	0.0319	0.02747	0.1613
647650.61	4197419.7	647650.61_4197419.7	1.67579	0.12414	0.06471	0.03717	0.03169	0.02765	0.15955
647670.61	4197419.7	647670.61_4197419.7	1.61978	0.12366	0.06443	0.03702	0.03149	0.02781	0.15776
647690.61	4197419.7	647690.61_4197419.7	1.56862	0.12333	0.06417	0.03689	0.03131	0.02795	0.156
647710.61	4197419.7	647710.61_4197419.7	1.51737	0.12306	0.06392	0.03677	0.03112	0.02805	0.1542
647730.61	4197419.7	647730.61_4197419.7	1.46821	0.12286	0.06367	0.03664	0.03093	0.02811	0.15241
647390.61	4197439.7	647390.61_4197439.7	2.16048	0.1366	0.06974	0.03966	0.03431	0.02489	0.17426
647410.61	4197439.7	647410.61_4197439.7	2.10968	0.13491	0.06915	0.03938	0.0341	0.02506	0.17336
647430.61	4197439.7	647430.61_4197439.7	2.07183	0.13332	0.06859	0.03907	0.03389	0.02525	0.17238
647450.61	4197439.7	647450.61_4197439.7	2.01072	0.13172	0.06799	0.03885	0.03366	0.02542	0.17122
647470.61	4197439.7	647470.61_4197439.7	1.95409	0.13031	0.06748	0.0386	0.03343	0.02562	0.17008

647490.61	4197439.7	647490.61_4197439.7	1.90184	0.12903	0.067	0.03837	0.03322	0.02584	0.16891
647510.61	4197439.7	647510.61_4197439.7	1.85315	0.12787	0.06656	0.03811	0.03301	0.02606	0.16768
647530.61	4197439.7	647530.61_4197439.7	1.80325	0.12676	0.06613	0.03792	0.03279	0.02628	0.16632
647550.61	4197439.7	647550.61_4197439.7	1.75137	0.12572	0.0657	0.03773	0.03256	0.02649	0.16483
647570.61	4197439.7	647570.61_4197439.7	1.70705	0.12484	0.06533	0.03755	0.03235	0.02672	0.16336
647590.61	4197439.7	647590.61_4197439.7	1.66153	0.12401	0.06498	0.03735	0.03213	0.02694	0.1618
647610.61	4197439.7	647610.61_4197439.7	1.61967	0.12333	0.06467	0.03716	0.03194	0.02717	0.16024
647630.61	4197439.7	647630.61_4197439.7	1.57032	0.12262	0.06432	0.03704	0.03171	0.02734	0.15849
647650.61	4197439.7	647650.61_4197439.7	1.52519	0.12207	0.06402	0.03691	0.03151	0.02752	0.15675
647670.61	4197439.7	647670.61_4197439.7	1.48291	0.12161	0.06374	0.03675	0.03131	0.02768	0.15503
647690.61	4197439.7	647690.61_4197439.7	1.44215	0.12124	0.06349	0.03662	0.03113	0.02782	0.15331
647710.61	4197439.7	647710.61_4197439.7	1.40124	0.12094	0.06324	0.0365	0.03094	0.02792	0.15155
647390.61	4197459.7	647390.61_4197459.7	1.89381	0.13447	0.06901	0.03938	0.0341	0.02476	0.17107
647410.61	4197459.7	647410.61_4197459.7	1.84235	0.13279	0.06842	0.03913	0.03389	0.02493	0.17018
647430.61	4197459.7	647430.61_4197459.7	1.81778	0.13125	0.06787	0.03881	0.03369	0.02513	0.16928
647450.61	4197459.7	647450.61_4197459.7	1.77786	0.12969	0.06729	0.03859	0.03346	0.0253	0.16817
647470.61	4197459.7	647470.61_4197459.7	1.73563	0.1283	0.06678	0.03833	0.03324	0.0255	0.16706
647490.61	4197459.7	647490.61_4197459.7	1.69242	0.12702	0.0663	0.03811	0.03302	0.02571	0.16592
647510.61	4197459.7	647510.61_4197459.7	1.64801	0.12584	0.06585	0.03786	0.03281	0.02593	0.16468
647530.61	4197459.7	647530.61_4197459.7	1.61071	0.1248	0.06545	0.03765	0.0326	0.02617	0.16342
647550.61	4197459.7	647550.61_4197459.7	1.5663	0.12374	0.06502	0.03746	0.03237	0.02637	0.16195
647570.61	4197459.7	647570.61_4197459.7	1.52986	0.12285	0.06464	0.0373	0.03215	0.02659	0.16049
647590.61	4197459.7	647590.61_4197459.7	1.49559	0.12204	0.0643	0.03709	0.03195	0.02681	0.15899
647610.61	4197459.7	647610.61_4197459.7	1.46207	0.12132	0.06398	0.03692	0.03174	0.02703	0.15743
647630.61	4197459.7	647630.61_4197459.7	1.42847	0.12069	0.06366	0.03675	0.03154	0.02723	0.1558
647650.61	4197459.7	647650.61_4197459.7	1.39248	0.12009	0.06335	0.03664	0.03133	0.02739	0.15409
647670.61	4197459.7	647670.61_4197459.7	1.35928	0.11962	0.06308	0.03647	0.03114	0.02755	0.15239
647690.61	4197459.7	647690.61_4197459.7	1.32416	0.11916	0.06279	0.03638	0.03094	0.02767	0.15063
647410.61	4197479.7	647410.61_4197479.7	1.63711	0.13075	0.0677	0.03887	0.03368	0.0248	0.16712
647430.61	4197479.7	647430.61_4197479.7	1.6127	0.12922	0.06716	0.03856	0.03348	0.025	0.16625
647450.61	4197479.7	647450.61_4197479.7	1.58976	0.12774	0.06661	0.03832	0.03327	0.02519	0.16524
647470.61	4197479.7	647470.61_4197479.7	1.55787	0.12633	0.06608	0.03806	0.03304	0.02537	0.16412
647490.61	4197479.7	647490.61_4197479.7	1.52407	0.12505	0.06561	0.03786	0.03283	0.02558	0.16299
647510.61	4197479.7	647510.61_4197479.7	1.48761	0.12389	0.06517	0.03761	0.03261	0.0258	0.1618
647530.61	4197479.7	647530.61_4197479.7	1.45496	0.12287	0.06477	0.03739	0.03241	0.02604	0.16057
647550.61	4197479.7	647550.61_4197479.7	1.41872	0.12185	0.06436	0.03719	0.03219	0.02625	0.15918
647570.61	4197479.7	647570.61_4197479.7	1.38522	0.12093	0.06397	0.03704	0.03197	0.02646	0.15772
647590.61	4197479.7	647590.61_4197479.7	1.35564	0.12011	0.06362	0.03685	0.03176	0.02668	0.15623
647610.61	4197479.7	647610.61_4197479.7	1.32788	0.11938	0.06329	0.03667	0.03155	0.02689	0.15469
647630.61	4197479.7	647630.61_4197479.7	1.30227	0.11875	0.06299	0.03649	0.03136	0.0271	0.15313
647650.61	4197479.7	647650.61_4197479.7	1.27398	0.11816	0.06269	0.03638	0.03115	0.02726	0.15147
647410.61	4197499.7	647410.61_4197499.7	1.47522	0.12877	0.06702	0.03861	0.03349	0.02468	0.16418
647430.61	4197499.7	647430.61_4197499.7	1.44626	0.12723	0.06646	0.03832	0.03327	0.02486	0.16328
647450.61	4197499.7	647450.61_4197499.7	1.43256	0.12584	0.06595	0.03805	0.03308	0.02507	0.16239
647470.61	4197499.7	647470.61_4197499.7	1.4083	0.12441	0.06541	0.0378	0.03285	0.02525	0.16127
647490.61	4197499.7	647490.61_4197499.7	1.3838	0.12315	0.06494	0.03761	0.03263	0.02546	0.16016
647510.61	4197499.7	647510.61_4197499.7	1.35575	0.122	0.0645	0.03735	0.03242	0.02568	0.159
647530.61	4197499.7	647530.61_4197499.7	1.32583	0.12094	0.06408	0.03715	0.03221	0.0259	0.15776
647550.61	4197499.7	647550.61_4197499.7	1.29821	0.12	0.0637	0.03692	0.03201	0.02614	0.15649
647570.61	4197499.7	647570.61_4197499.7	1.26682	0.11907	0.0633	0.03678	0.03178	0.02634	0.15504
647590.61	4197499.7	647590.61_4197499.7	1.24117	0.11827	0.06296	0.03659	0.03158	0.02656	0.15359
647610.61	4197499.7	647610.61_4197499.7	1.21756	0.11754	0.06265	0.03639	0.03138	0.02677	0.1521
647630.61	4197499.7	647630.61_4197499.7	1.19276	0.11685	0.06232	0.03626	0.03117	0.02695	0.1505
647410.61	4197519.7	647410.61_4197519.7	1.34262	0.12685	0.06634	0.03834	0.03329	0.02456	0.16132
647430.61	4197519.7	647430.61_4197519.7	1.31198	0.12532	0.06578	0.03808	0.03307	0.02474	0.16043
647450.61	4197519.7	647450.61_4197519.7	1.29837	0.12394	0.06528	0.03779	0.03288	0.02495	0.15957
647470.61	4197519.7	647470.61_4197519.7	1.28252	0.12258	0.06476	0.03754	0.03266	0.02514	0.15853
647490.61	4197519.7	647490.61_4197519.7	1.2639	0.12131	0.06428	0.03736	0.03244	0.02534	0.15741
647510.61	4197519.7	647510.61_4197519.7	1.24237	0.12015	0.06383	0.03711	0.03223	0.02555	0.15626
647530.61	4197519.7	647530.61_4197519.7	1.21826	0.1191	0.06341	0.0369	0.03202	0.02577	0.15506
647550.61	4197519.7	647550.61_4197519.7	1.1941	0.11815	0.06303	0.03669	0.03182	0.026	0.15381
647570.61	4197519.7	647570.61_4197519.7	1.16938	0.11728	0.06267	0.03651	0.03161	0.02623	0.15247
647172.4	4195739.59	647172.4_4195739.59	0.35369	35.98756	0.42474	0.09341	0.07182	0.0416	77.06741
647151.37	4195742.06	647151.37_4195742.06	0.34949	43.93445	0.43151	0.09429	0.07225	0.04185	54.50415
647151.37	4195757.53	647151.37_4195757.53	0.35703	45.22298	0.41686	0.09338	0.07169	0.04155	31.31929
647170.55	4195800.2	647170.55_4195800.2	0.38478	41.89475	0.37339	0.09004	0.06971	0.04049	15.5378
647173.64	4195821.23	647173.64_4195821.23	0.39776	41.76331	0.35704	0.0888	0.06891	0.04008	12.14327
646663.22	4195543.59	646663.22_4195543.59	0.19252	2.65035	0.87483	0.13132	0.08353	0.05093	0.8655
646780.93	4195686.38	646780.93_4195686.38	0.23808	4.13644	0.68837	0.11717	0.07756	0.04919	1.47658
646717.25	4195065.04	646717.25_4195065.04	0.13851	0.92347	2.00523	0.19792	0.11441	0.06279	0.39678
646740.41	4194895.23	646740.41_4194895.23	0.12393	0.67646	2.69861	0.23576	0.1301	0.06865	0.31685
646628.71	4193389.31	646628.71_4193389.31	0.05686	0.12128	0.55137	11.9599	1.67607	0.22769	0.09171
647553.44	4191992.81	647553.44_4191992.81	0.03853	0.06875	0.1365	0.35307	1.24852	5.8589	0.05728
647576.55	4191953.42	647576.55_4191953.42	0.03836	0.06765	0.13315	0.33717	1.11669	5.25934	0.05681
647925.04	4191827.55	647925.04_4191827.55	0.04094	0.06278	0.12771	0.29427	0.79779	11.06739	0.05905
648365.45	4186371.83	648365.45_4186371.83	0.01413	0.01767	0.0199	0.02353	0.0269	0.03857	0.01677
648245.45	4186491.83	648245.45_4186491.83	0.014	0.01802	0.02059	0.02434	0.02807	0.03765	0.01659
648225.45	4186711.83	648225.45_4186711.83	0.01443	0.01865	0.02138	0.02545	0.0295	0.04018	0.01717
649748.61	4182643.03	649748.61_4182643.03	0.00942	0.00943	0.01054	0.01305	0.01345	0.0143	0.0101
CONCUNIT ug	/m^3	CONCUNIT ug_/m^3							
DEPUNIT g/m	^2	DEPUNIT g/m_^2							

Mossdale Construction HRA

Summary of AERMOD Source Outputs for All Offsite Receptors - Part 2

X	Y	Lookup	ID 7	ID 8abcd	ID 9	ID 10	AR7	AR8	AR9	AR10
				Construction				Truck Routes		
647495.03	4190391.71	647495.03_4190391.71	4.03157	0.03089	0.02821	0.0089	0.0842	0.04811	0.03554	0.02574
647515.03	4190411.71	647515.03_4190411.71	4.08612	0.03059	0.02797	0.00892	0.0831	0.04757	0.03525	0.02564
647535.03	4190431.71	647535.03_4190431.71	4.09372	0.03028	0.02772	0.00893	0.082	0.04701	0.03494	0.02553
647695.03	4190431.71	647695.03_4190431.71	5.6104	0.02939	0.02706	0.00908	0.08066	0.04575	0.03407	0.02557
647715.03	4190431.71	647715.03_4190431.71	5.72283	0.02931	0.02701	0.00908	0.08037	0.04556	0.03389	0.02557
647555.03	4190451.71	647555.03_4190451.71	3.73531	0.02996	0.02747	0.00894	0.08096	0.04648	0.03465	0.02543
647575.03	4190451.71	647575.03_4190451.71	4.02556	0.02986	0.0274	0.00897	0.08076	0.0463	0.03454	0.02544
647635.03	4190451.71	647635.03_4190451.71	4.47039	0.02951	0.02716	0.00903	0.08024	0.04581	0.0342	0.02547
647695.03	4190451.71	647695.03_4190451.71	4.36967	0.02917	0.02689	0.00904	0.07975	0.04537	0.03383	0.02544
647715.03	4190451.71	647715.03_4190451.71	4.6399	0.02909	0.02685	0.00904	0.07945	0.04517	0.03365	0.02545
647735.03	4190451.71	647735.03_4190451.71	4.80196	0.02901	0.02678	0.00903	0.0792	0.04501	0.0335	0.02542
647755.03	4190451.71	647755.03_4190451.71	5.03326	0.02895	0.02671	0.00902	0.07896	0.04487	0.03334	0.0254
647595.03	4190471.71	647595.03_4190471.71	3.31977	0.02953	0.02716	0.00897	0.07969	0.04575	0.03421	0.02533
647615.03	4190471.71	647615.03_4190471.71	3.37691	0.02941	0.02707	0.00898	0.07952	0.04559	0.03409	0.02534
647755.03	4190471.71	647755.03_4190471.71	4.5952	0.02874	0.02655	0.00898	0.07805	0.04449	0.0331	0.02527
647655.03	4190491.71	647655.03_4190491.71	2.90886	0.02897	0.02675	0.00897	0.0783	0.0449	0.03362	0.02522
647675.03	4190491.71	647675.03_4190491.71	3.0388	0.02886	0.02668	0.00898	0.07808	0.04473	0.03348	0.02522
647755.03	4190491.71	647755.03_4190491.71	4.39171	0.02854	0.0264	0.00894	0.07717	0.04413	0.03287	0.02514
647675.03	4190511.71	647675.03_4190511.71	2.71267	0.02866	0.02653	0.00894	0.07719	0.04435	0.03324	0.0251
647675.03	4190531.71	647675.03_4190531.71	2.5128	0.02845	0.02637	0.00891	0.07632	0.04397	0.033	0.02497
647695.03	4190531.71	647695.03_4190531.71	2.75995	0.02836	0.0263	0.0089	0.07612	0.04382	0.03286	0.02496
647675.03	4190551.71	647675.03_4190551.71	2.39774	0.02825	0.02622	0.00887	0.07549	0.04362	0.03278	0.02485
647695.03	4190551.71	647695.03_4190551.71	2.68761	0.02816	0.02615	0.00887	0.07526	0.04345	0.03263	0.02483
647675.03	4190571.71	647675.03_4190571.71	2.29224	0.02804	0.02605	0.00883	0.07474	0.0433	0.03258	0.02472
647695.03	4190571.71	647695.03_4190571.71	2.67512	0.02796	0.026	0.00883	0.07444	0.0431	0.0324	0.02471
647715.03	4190571.71	647715.03_4190571.71	3.25649	0.02788	0.02592	0.00882	0.07422	0.04295	0.03226	0.02469
647675.03	4190591.71	647675.03_4190591.71	2.1809	0.02782	0.02588	0.00879	0.07395	0.04297	0.03235	0.02458
647695.03	4190591.71	647695.03_4190591.71	2.68559	0.02776	0.02585	0.00879	0.07362	0.04274	0.03218	0.02459
647715.03	4190591.71	647715.03_4190591.71	3.30159	0.02768	0.02578	0.00878	0.07339	0.04259	0.03203	0.02456
647675.03	4190611.71	647675.03_4190611.71	2.11928	0.02763	0.02573	0.00875	0.07314	0.04261	0.03213	0.02446
647695.03	4190611.71	647695.03_4190611.71	2.68556	0.02757	0.0257	0.00876	0.0728	0.04239	0.03195	0.02446
647675.03	4190631.71	647675.03_4190631.71	2.06634	0.02745	0.02561	0.00873	0.07231	0.04224	0.03191	0.02436
647419.23	4190111.88	647419.23_4190111.88	1.81918	0.03435	0.03099	0.00894	0.1009	0.0551	0.03916	0.02767
647449.21	4190105.57	647449.21_4190105.57	2.07461	0.03433	0.03092	0.00903	0.10088	0.05495	0.03916	0.02766
648003.74	4189070.22	648003.74_4189070.22	1.7044	0.05031	0.04109	0.0122	0.22402	0.08814	0.05567	0.03739
647945.66	4188974.2	647945.66_4188974.2	1.1934	0.05369	0.04296	0.01234	0.24774	0.09453	0.05907	0.03866
648305.45	4186351.83	648305.45_4186351.83	0.10509	2.28014	0.2139	0.02951	0.38245	76.21183	0.6498	0.15577
648325.45	4186351.83	648325.45_4186351.83	0.10579	2.03204	0.2125	0.02918	0.39162	141.68967	0.64721	0.15574
648285.45	4186371.83	648285.45_4186371.83	0.10585	2.57429	0.21046	0.02944	0.38448	35.87284	0.62634	0.15329
648305.45	4186371.83	648305.45_4186371.83	0.10647	2.24568	0.20926	0.02912	0.39419	39.88704	0.62392	0.15334
648325.45	4186371.83	648325.45_4186371.83	0.10718	2.00544	0.20794	0.02879	0.40405	47.03952	0.62118	0.15333
648345.45	4186371.83	648345.45_4186371.83	0.10793	1.82031	0.20669	0.02849	0.41316	59.1189	0.61785	0.15327
648365.45	4186371.83	648365.45_4186371.83	0.10871	1.67333	0.2055	0.02821	0.42116	89.41891	0.61402	0.15314
648285.45	4186391.83	648285.45_4186391.83	0.10731	2.49547	0.20583	0.02904	0.39655	24.52919	0.60231	0.15093
648305.45	4186391.83	648305.45_4186391.83	0.10795	2.18914	0.20464	0.02872	0.40694	27.01359	0.59975	0.15096
648325.45	4186391.83	648325.45_4186391.83	0.10869	1.96507	0.20332	0.02841	0.41762	30.8312	0.59703	0.15093
648345.45	4186391.83	648345.45_4186391.83	0.1094	1.78949	0.20223	0.02811	0.42718	35.01126	0.59339	0.15085
648365.45	4186391.83	648365.45_4186391.83	0.11019	1.65135	0.20114	0.02785	0.43589	41.64983	0.58957	0.15073
648385.45	4186391.83	648385.45_4186391.83	0.11098	1.53763	0.2002	0.02763	0.44329	51.23745	0.58524	0.15053
648405.45	4186391.83	648405.45_4186391.83	0.11181	1.44195	0.19931	0.02746	0.44985	69.38838	0.58074	0.15026
648285.45	4186411.83	648285.45_4186411.83	0.10881	2.38961	0.20138	0.02865	0.40934	18.38665	0.57954	0.14864
648305.45	4186411.83	648305.45_4186411.83	0.10949	2.11848	0.20008	0.02833	0.42064	20.2731	0.57714	0.14863
648325.45	4186411.83	648325.45_4186411.83	0.11021	1.91463	0.19889	0.02803	0.43191	22.48427	0.57416	0.14858
648345.45	4186411.83	648345.45_4186411.83	0.11094	1.75439	0.19788	0.02775	0.44228	24.90147	0.57051	0.1485
648365.45	4186411.83	648365.45_4186411.83	0.11175	1.62715	0.19677	0.0275	0.45187	28.51507	0.56683	0.14833
648385.45	4186411.83	648385.45_4186411.83	0.11253	1.52076	0.19598	0.0273	0.45975	32.35069	0.56243	0.14814
648405.45	4186411.83	648405.45_4186411.83	0.11336	1.43072	0.19521	0.02716	0.46672	37.83329	0.55793	0.14785
648425.45	4186411.83	648425.45_4186411.83	0.11422	1.35251	0.1945	0.02707	0.47357	46.20311	0.55344	0.14748
648445.45	4186411.83	648445.45_4186411.83	0.11507	1.28249	0.19393	0.02706	0.4806	59.0599	0.54875	0.14705
648265.45	4186431.83	648265.45_4186431.83	0.10967	2.59201	0.19836	0.02858	0.41175	13.53306	0.56005	0.14638
648285.45	4186431.83	648285.45_4186431.83	0.11032	2.27554	0.19714	0.02827	0.42283	14.60308	0.5579	0.1464
648305.45	4186431.83	648305.45_4186431.83	0.11105	2.04448	0.1958	0.02796	0.43496	15.97698	0.55554	0.14635
648325.45	4186431.83	648325.45_4186431.83	0.11178	1.86529	0.19459	0.02766	0.44711	17.51281	0.55258	0.14627
648345.45	4186431.83	648345.45_4186431.83	0.11254	1.72218	0.19356	0.0274	0.45858	19.23901	0.54912	0.14617
648365.45	4186431.83	648365.45_4186431.83	0.11334	1.60492	0.19262	0.02717	0.46879	21.28897	0.54531	0.146
648385.45	4186431.83	648385.45_4186431.83	0.11415	1.50654	0.19186	0.02699	0.47752	23.60267	0.5411	0.14578
648405.45	4186431.83	648405.45_4186431.83	0.11499	1.42201	0.19115	0.02687	0.48517	26.54796	0.53675	0.14547
648425.45	4186431.83	648425.45_4186431.83	0.11587	1.34779	0.1904	0.0268	0.49272	30.69593	0.53246	0.14506
648445.45	4186431.83	648445.45_4186431.83	0.11672	1.28026	0.19	0.02681	0.5	35.14389	0.52778	0.14464
648465.45	4186431.83	648465.45_4186431.83	0.11756	1.21956	0.18956	0.02688	0.50812	41.48182	0.52324	0.14411
648485.45	4186431.83	648485.45_4186431.83	0.11842	1.16578	0.18914	0.02699	0.51717	51.62625	0.51898	0.14353
648505.45	4186431.83	648505.45_4186431.83	0.11926	1.11782	0.18867	0.02716	0.5266	70.69123	0.51492	0.14287
648265.45	4186451.83	648265.45_4186451.83	0.11123	2.4278	0.19408	0.0282	0.42591	11.33147	0.53987	0.14417
648285.45	4186451.83	648285.45_4186451.83	0.11188	2.173	0.19298	0.02789	0.43723	12.09098	0.53745	0.14419
648305.45	4186451.83	648305.45_4186451.83	0.1126	1.98035	0.19179	0.02759	0.44993	13.03935	0.53493	0.14416
648325.45	4186451.83	648325.45_4186451.83	0.11339	1.82588	0.19051	0.02731	0.46322	14.21412	0.53215	0.14403
648345.45	4186451.83	648345.45_4186451.83	0.11416	1.69766	0.18953	0.02706	0.47564	15.41124	0.52874	0.14391
648365.45	4186451.83	648365.45_4186451.83	0.11497	1.58984	0.1886	0.02684	0.48688	16.82002	0.52503	0.14371
648385.45	4186451.83	648385.45_4186451.83	0.11581	1.49804	0.18779	0.02668	0.49666	18.44336	0.52106	0.14344
648405.45	4186451.83	648405.45_4186451.83	0.11667	1.41788	0.18712	0.02658	0.50511	20.31976	0.51688	0.14312

648425.45	4186451.83	648425.45_4186451.83	0.11756	1.34611	0.18652	0.02655	0.51309	22.58373	0.51259	0.14271
648445.45	4186451.83	648445.45_4186451.83	0.11844	1.28077	0.18615	0.02657	0.52111	25.09781	0.50815	0.14227
648465.45	4186451.83	648465.45_4186451.83	0.11931	1.2217	0.18574	0.02666	0.52995	28.3024	0.50382	0.14174
648485.45	4186451.83	648485.45_4186451.83	0.12021	1.16928	0.1853	0.02679	0.53983	32.82261	0.49977	0.14112
648505.45	4186451.83	648505.45_4186451.83	0.12103	1.12161	0.18502	0.02697	0.5495	38.04618	0.49562	0.14048
648525.45	4186451.83	648525.45_4186451.83	0.12188	1.07893	0.18461	0.02718	0.55992	46.60925	0.49188	0.13977
648545.45	4186451.83	648545.45_4186451.83	0.12265	1.03846	0.18421	0.0274	0.57025	59.60946	0.48816	0.13904
648265.45	4186471.83	648265.45_4186471.83	0.11283	2.30309	0.19004	0.02783	0.44098	9.69246	0.52063	0.14204
648285.45	4186471.83	648285.45_4186471.83	0.11349	2.0974	0.18895	0.02752	0.45275	10.29275	0.51816	0.14203
648305.45	4186471.83	648305.45_4186471.83	0.11425	1.9362	0.1878	0.02724	0.46623	11.02746	0.51563	0.14199
648325.45	4186471.83	648325.45_4186471.83	0.11504	1.80108	0.1865	0.02696	0.48046	11.91471	0.51289	0.14182
648345.45	4186471.83	648345.45_4186471.83	0.11581	1.68546	0.18575	0.02673	0.49369	12.70778	0.50936	0.14173
648365.45	4186471.83	648365.45_4186471.83	0.11662	1.58485	0.1849	0.02654	0.50592	13.66861	0.50568	0.14152
648385.45	4186471.83	648385.45_4186471.83	0.11749	1.49766	0.18413	0.0264	0.51672	14.79985	0.50186	0.14122
648405.45	4186471.83	648405.45_4186471.83	0.11838	1.42029	0.18341	0.02632	0.52618	16.12729	0.49792	0.14086
648425.45	4186471.83	648425.45_4186471.83	0.11929	1.34985	0.18275	0.0263	0.53508	17.67674	0.49388	0.14039
648445.45	4186471.83	648445.45_4186471.83	0.12021	1.28534	0.18227	0.02634	0.54413	19.4231	0.48975	0.13989
648465.45	4186471.83	648465.45_4186471.83	0.12112	1.22692	0.18194	0.02644	0.55378	21.37655	0.48561	0.13937
648485.45	4186471.83	648485.45_4186471.83	0.12203	1.17448	0.18158	0.02659	0.5643	23.81292	0.48163	0.13875
648505.45	4186471.83	648505.45_4186471.83	0.12289	1.127	0.18137	0.02678	0.57485	26.49224	0.47764	0.13813
648525.45	4186471.83	648525.45_4186471.83	0.12375	1.08403	0.18102	0.027	0.58612	30.29345	0.47401	0.13742
648545.45	4186471.83	648545.45_4186471.83	0.12457	1.0434	0.18061	0.02722	0.59771	35.23122	0.47051	0.13668
648565.45	4186471.83	648565.45_4186471.83	0.12534	1.00416	0.18017	0.02745	0.60985	41.7312	0.46706	0.13592
648585.45	4186471.83	648585.45_4186471.83	0.12605	0.966	0.17968	0.02767	0.62286	51.09775	0.46361	0.13515
648605.45	4186471.83	648605.45_4186471.83	0.12673	0.92927	0.17891	0.02786	0.6375	69.23744	0.46031	0.13432
648245.45	4186491.83	648245.45_4186491.83	0.11372	2.42613	0.18736	0.02776	0.44628	7.94724	0.50422	0.13996
648265.45	4186491.83	648265.45_4186491.83	0.11446	2.22661	0.18615	0.02746	0.45712	8.43004	0.50236	0.13996
648285.45	4186491.83	648285.45_4186491.83	0.1152	2.05903	0.18498	0.02717	0.46975	8.95999	0.50012	0.13993
648305.45	4186491.83	648305.45_4186491.83	0.11596	1.91845	0.18389	0.02689	0.48385	9.52735	0.49749	0.13987
648325.45	4186491.83	648325.45_4186491.83	0.11674	1.79695	0.18275	0.02663	0.49886	10.17327	0.49462	0.1397
648345.45	4186491.83	648345.45_4186491.83	0.11751	1.68912	0.182	0.02641	0.51323	10.77861	0.49116	0.13957
648365.45	4186491.83	648365.45_4186491.83	0.11834	1.59302	0.18119	0.02624	0.52666	11.4875	0.48757	0.13933
648385.45	4186491.83	648385.45_4186491.83	0.11921	1.50791	0.18047	0.02612	0.53847	12.29816	0.48382	0.13902
648405.45	4186491.83	648405.45_4186491.83	0.12012	1.43103	0.17984	0.02607	0.54883	13.22135	0.47998	0.13864
648425.45	4186491.83	648425.45_4186491.83	0.12106	1.36011	0.1793	0.02607	0.55844	14.25028	0.47603	0.13819
648445.45	4186491.83	648445.45_4186491.83	0.122	1.29457	0.17887	0.02613	0.56825	15.39169	0.47203	0.13768
648465.45	4186491.83	648465.45_4186491.83	0.12295	1.23537	0.17843	0.02624	0.5791	16.7636	0.46819	0.1371
648485.45	4186491.83	648485.45_4186491.83	0.1239	1.18238	0.178	0.0264	0.59082	18.38515	0.46446	0.13645
648505.45	4186491.83	648505.45_4186491.83	0.12482	1.13471	0.17766	0.02659	0.60292	20.22874	0.46081	0.13577
648525.45	4186491.83	648525.45_4186491.83	0.1257	1.09072	0.17747	0.02682	0.61499	22.21707	0.45722	0.13511
648545.45	4186491.83	648545.45_4186491.83	0.12656	1.04926	0.177	0.02704	0.62814	24.98161	0.45396	0.13435
648565.45	4186491.83	648565.45_4186491.83	0.12735	1.00898	0.17671	0.02727	0.64136	27.8517	0.45059	0.13364
648585.45	4186491.83	648585.45_4186491.83	0.12811	0.97026	0.17621	0.02748	0.6561	31.90934	0.44741	0.13288
648605.45	4186491.83	648605.45_4186491.83	0.12881	0.93292	0.1755	0.02766	0.67219	37.72348	0.44429	0.13207
648625.45	4186491.83	648625.45_4186491.83	0.12944	0.89673	0.17496	0.02783	0.68777	44.66389	0.44083	0.13134
648645.45	4186491.83	648645.45_4186491.83	0.13007	0.86285	0.1741	0.02794	0.70398	57.26652	0.4374	0.13056
648665.45	4186491.83	648665.45_4186491.83	0.13066	0.831	0.17311	0.02801	0.7194	88.44514	0.43377	0.12978
648245.45	4186511.83	648245.45_4186511.83	0.11539	2.35758	0.18345	0.0274	0.46356	7.05374	0.48709	0.13791
648265.45	4186511.83	648265.45_4186511.83	0.11611	2.20123	0.18239	0.0271	0.47439	7.41216	0.48494	0.1379
648285.45	4186511.83	648285.45_4186511.83	0.11691	2.06026	0.18125	0.02682	0.48764	7.85066	0.48277	0.13787
648305.45	4186511.83	648305.45_4186511.83	0.1177	1.93184	0.18009	0.02654	0.50267	8.3293	0.48027	0.13775
648325.45	4186511.83	648325.45_4186511.83	0.11849	1.81625	0.17908	0.0263	0.51862	8.82435	0.47736	0.13759
648345.45	4186511.83	648345.45_4186511.83	0.1193	1.71157	0.17829	0.0261	0.5344	9.32415	0.47406	0.13743
648365.45	4186511.83	648365.45_4186511.83	0.12013	1.61604	0.17757	0.02595	0.54914	9.85847	0.47053	0.13718
648385.45	4186511.83	648385.45_4186511.83	0.12101	1.52962	0.17692	0.02586	0.56207	10.44548	0.46682	0.13685
648405.45	4186511.83	648405.45_4186511.83	0.12193	1.4509	0.17633	0.02582	0.57346	11.11895	0.46308	0.13645
648425.45	4186511.83	648425.45_4186511.83	0.12288	1.37752	0.17584	0.02584	0.584	11.85168	0.45924	0.13598
648445.45	4186511.83	648445.45_4186511.83	0.12385	1.30971	0.17542	0.02592	0.59475	12.66562	0.45541	0.13546
648465.45	4186511.83	648465.45_4186511.83	0.12483	1.24841	0.17506	0.02605	0.6065	13.58224	0.45166	0.13488
648485.45	4186511.83	648485.45_4186511.83	0.1258	1.19383	0.17473	0.02622	0.61915	14.60744	0.44803	0.13425
648505.45	4186511.83	648505.45_4186511.83	0.12677	1.14518	0.17437	0.02642	0.63269	15.83522	0.44461	0.13357
648525.45	4186511.83	648525.45_4186511.83	0.1277	1.09987	0.17394	0.02663	0.64688	17.28796	0.4414	0.13282
648545.45	4186511.83	648545.45_4186511.83	0.12859	1.05674	0.17359	0.02686	0.66135	18.85946	0.43824	0.13209
648565.45	4186511.83	648565.45_4186511.83	0.12944	1.01533	0.17324	0.02708	0.67659	20.63778	0.43515	0.13137
648585.45	4186511.83	648585.45_4186511.83	0.13022	0.9753	0.17271	0.02728	0.69327	22.92158	0.43219	0.1306
648605.45	4186511.83	648605.45_4186511.83	0.13096	0.93696	0.17218	0.02746	0.71051	25.59497	0.42918	0.12986
648625.45	4186511.83	648625.45_4186511.83	0.13162	0.90015	0.17171	0.02762	0.72719	28.42825	0.4259	0.12917
648645.45	4186511.83	648645.45_4186511.83	0.13228	0.86615	0.1709	0.02772	0.74449	32.93414	0.42273	0.12842
648665.45	4186511.83	648665.45_4186511.83	0.1329	0.83417	0.17002	0.02778	0.76031	38.55063	0.4193	0.12768
648685.45	4186511.83	648685.45_4186511.83	0.1335	0.80426	0.16901	0.02778	0.77473	45.55609	0.41561	0.12695
648705.45	4186511.83	648705.45_4186511.83	0.13414	0.77618	0.16786	0.02773	0.78783	56.07599	0.41173	0.12622
648245.45	4186531.83	648245.45_4186531.83	0.11708	2.37201	0.17972	0.02704	0.48204	6.30878	0.47075	0.13591
648265.45	4186531.83	648265.45_4186531.83	0.11784	2.23622	0.17871	0.02675	0.49333	6.6022	0.46858	0.13591
648285.45	4186531.83	648285.45_4186531.83	0.11865	2.1065	0.17762	0.02648	0.50696	6.94801	0.46632	0.13586
648305.45	4186531.83	648305.45_4186531.83	0.11948	1.98147	0.17648	0.02621	0.5229	7.3416	0.46388	0.13572
648325.45	4186531.83	648325.45_4186531.83	0.12028	1.86296	0.17563	0.02599	0.53974	7.71817	0.4609	0.13558
648345.45	4186531.83	648345.45_4186531.83	0.12112	1.75393	0.17474	0.02581	0.55712	8.14024	0.45782	0.13534
648365.45	4186531.83	648365.45_4186531.83	0.12199	1.65419	0.17394	0.02567	0.57359	8.59106	0.4545	0.13502
648385.45	4186531.83	648385.45_4186531.83	0.12289	1.56397	0.17328	0.02559	0.58813	9.06452	0.45097	0.13467
648405.45	4186531.83	648405.45_4186531.83	0.12383	1.48106	0.17281	0.02558	0.60062	9.55451	0.44726	0.13428
648425.45	4186531.83	648425.45_4186531.83	0.12478	1.40318	0.17244	0.02563	0.61204	10.06942	0.44345	0.13382
648445.45	4186531.83	648445.45_4186531.83	0.12576	1.33162	0.17208	0.02572	0.62373	10.64629	0.4397	0.13328
648465.45	4186531.83	648465.45_4186531.83	0.12677	1.26763	0.17173	0.02587	0.63664	11.30026	0.4361	0.13269
648485.45	4186531.83	648485.45_4186531.83	0.12778	1.21091	0.17142	0.02605	0.65065	12.02228	0.43264	0.13205
648505.45	4186531.83	648505.45_4186531.83	0.12879	1.16024	0.17103	0.02625	0.66585	12.87596	0.42942	0.13136
648605.45	4186531.83	648605.45_4186531.83	0.13318	0.942	0.16895	0.02727	0.75298	18.69232	0.41489	0.12771

648625.45	4186531.83	648625.45_4186531.83	0.13391	0.90481	0.16844	0.02741	0.77153	20.24537	0.41197	0.12702
648645.45	4186531.83	648645.45_4186531.83	0.13457	0.87005	0.16776	0.0275	0.78934	22.04045	0.40892	0.12631
648665.45	4186531.83	648665.45_4186531.83	0.13523	0.83789	0.16689	0.02754	0.80599	24.05075	0.40574	0.1256
648685.45	4186531.83	648685.45_4186531.83	0.13586	0.8077	0.16595	0.02753	0.82078	25.91973	0.40229	0.1249
648705.45	4186531.83	648705.45_4186531.83	0.13651	0.77923	0.16489	0.02747	0.83395	27.69823	0.39859	0.1242
648245.45	4186551.83	648245.45_4186551.83	0.1188	2.47972	0.17615	0.02669	0.50183	5.67837	0.45518	0.13398
648265.45	4186551.83	648265.45_4186551.83	0.11961	2.33958	0.17514	0.02641	0.51385	5.92525	0.45304	0.13395
648285.45	4186551.83	648285.45_4186551.83	0.12046	2.20419	0.17409	0.02614	0.52807	6.20846	0.45079	0.13388
648305.45	4186551.83	648305.45_4186551.83	0.12131	2.07034	0.173	0.02589	0.5447	6.525	0.44834	0.13371
648325.45	4186551.83	648325.45_4186551.83	0.1221	1.93807	0.17227	0.02569	0.5625	6.80877	0.44527	0.13357
648345.45	4186551.83	648345.45_4186551.83	0.12295	1.81657	0.17147	0.02552	0.58128	7.13726	0.44219	0.13332
648365.45	4186551.83	648365.45_4186551.83	0.12384	1.70687	0.17075	0.02541	0.59935	7.4842	0.43894	0.13301
648385.45	4186551.83	648385.45_4186551.83	0.12478	1.60948	0.1701	0.02536	0.61568	7.8655	0.4356	0.13263
648405.45	4186551.83	648405.45_4186551.83	0.12575	1.52053	0.16947	0.02535	0.62999	8.27792	0.43216	0.13216
648425.45	4186551.83	648425.45_4186551.83	0.12674	1.43778	0.169	0.02541	0.64303	8.70456	0.42861	0.13164
648445.45	4186551.83	648445.45_4186551.83	0.12776	1.36207	0.16868	0.02553	0.65605	9.1415	0.42502	0.13111
648465.45	4186551.83	648465.45_4186551.83	0.1288	1.29414	0.16843	0.02568	0.67012	9.60007	0.42147	0.13054
648485.45	4186551.83	648485.45_4186551.83	0.12984	1.23438	0.16809	0.02587	0.68576	10.12811	0.41818	0.12988
648625.45	4186551.83	648625.45_4186551.83	0.13623	0.9104	0.16522	0.02719	0.82068	15.08953	0.39872	0.12491
648645.45	4186551.83	648645.45_4186551.83	0.13695	0.87506	0.16456	0.02727	0.83969	15.87303	0.39592	0.12422
648665.45	4186551.83	648665.45_4186551.83	0.13764	0.84226	0.16375	0.0273	0.85701	16.53041	0.39295	0.12353
648685.45	4186551.83	648685.45_4186551.83	0.13831	0.81156	0.16285	0.02728	0.8724	16.90285	0.38975	0.12286
648705.45	4186551.83	648705.45_4186551.83	0.139	0.7826	0.16179	0.0272	0.88628	16.68006	0.38635	0.12216
648245.45	4186571.83	648245.45_4186571.83	0.12056	2.69862	0.17264	0.02635	0.5232	5.14713	0.44042	0.13206
648265.45	4186571.83	648265.45_4186571.83	0.12145	2.52664	0.17161	0.02607	0.53629	5.36192	0.43839	0.13202
648285.45	4186571.83	648285.45_4186571.83	0.12232	2.36149	0.17059	0.02581	0.5511	5.59352	0.43611	0.13191
648305.45	4186571.83	648305.45_4186571.83	0.12319	2.20201	0.16965	0.02558	0.56838	5.83906	0.43356	0.13176
648325.45	4186571.83	648325.45_4186571.83	0.12399	2.04616	0.16895	0.02539	0.58731	6.06658	0.43053	0.13158
648345.45	4186571.83	648345.45_4186571.83	0.12484	1.90352	0.1682	0.02525	0.6076	6.32298	0.42745	0.1313
648365.45	4186571.83	648365.45_4186571.83	0.12576	1.77809	0.16752	0.02516	0.62763	6.60348	0.4243	0.13098
648385.45	4186571.83	648385.45_4186571.83	0.12672	1.66852	0.16693	0.02512	0.64576	6.90053	0.42103	0.13059
648405.45	4186571.83	648405.45_4186571.83	0.1277	1.56983	0.16643	0.02515	0.66157	7.20398	0.41763	0.13014
648425.45	4186571.83	648425.45_4186571.83	0.12873	1.4798	0.16602	0.02522	0.676	7.52284	0.41418	0.12962
648445.45	4186571.83	648445.45_4186571.83	0.12979	1.39906	0.16561	0.02534	0.69081	7.87812	0.41083	0.12905
648465.45	4186571.83	648465.45_4186571.83	0.13086	1.32708	0.1652	0.0255	0.70696	8.25436	0.40756	0.1284
648645.45	4186571.83	648645.45_4186571.83	0.13941	0.88113	0.16165	0.02705	0.89465	11.79764	0.38348	0.12224
648665.45	4186571.83	648665.45_4186571.83	0.14011	0.84691	0.16099	0.02708	0.91194	11.80885	0.38062	0.12161
648685.45	4186571.83	648685.45_4186571.83	0.1408	0.8151	0.16012	0.02704	0.92772	11.58014	0.37762	0.12096
648705.45	4186571.83	648705.45_4186571.83	0.14154	0.78549	0.15908	0.02695	0.94241	10.96232	0.37451	0.12029
648245.45	4186591.83	648245.45_4186591.83	0.12235	3.06183	0.16931	0.02601	0.54588	4.68598	0.42632	0.13021
648265.45	4186591.83	648265.45_4186591.83	0.12325	2.80952	0.16838	0.02575	0.55995	4.85449	0.42413	0.13014
648285.45	4186591.83	648285.45_4186591.83	0.12419	2.58572	0.16741	0.0255	0.57575	5.04693	0.42191	0.13004
648305.45	4186591.83	648305.45_4186591.83	0.12511	2.38378	0.16637	0.02528	0.59418	5.26147	0.41955	0.12983
648325.45	4186591.83	648325.45_4186591.83	0.12596	2.19139	0.16573	0.02511	0.61448	5.44698	0.41657	0.12964
648345.45	4186591.83	648345.45_4186591.83	0.12683	2.01963	0.16501	0.02498	0.63649	5.65337	0.41354	0.12933
648365.45	4186591.83	648365.45_4186591.83	0.12777	1.87186	0.16437	0.02491	0.65869	5.88187	0.41048	0.129
648385.45	4186591.83	648385.45_4186591.83	0.12878	1.74647	0.16375	0.0249	0.67929	6.13292	0.40741	0.12858
648405.45	4186591.83	648405.45_4186591.83	0.12973	1.63207	0.16336	0.02494	0.69659	6.34865	0.40394	0.12811
648425.45	4186591.83	648425.45_4186591.83	0.13077	1.53177	0.16297	0.02503	0.71263	6.59022	0.40058	0.12758
648445.45	4186591.83	648445.45_4186591.83	0.13187	1.44368	0.16263	0.02517	0.72911	6.85517	0.39735	0.12702
648465.45	4186591.83	648465.45_4186591.83	0.13299	1.36658	0.16228	0.02534	0.74716	7.13316	0.39422	0.12639
648605.45	4186591.83	648605.45_4186591.83	0.14027	0.96805	0.16015	0.02669	0.91006	8.88353	0.37624	0.12169
648625.45	4186591.83	648625.45_4186591.83	0.14113	0.92647	0.15955	0.02679	0.93402	9.03293	0.374	0.12101
648645.45	4186591.83	648645.45_4186591.83	0.14194	0.88826	0.1588	0.02683	0.95608	9.09429	0.37167	0.12032
648665.45	4186591.83	648665.45_4186591.83	0.14267	0.85224	0.15818	0.02685	0.97391	8.88864	0.369	0.11971
648685.45	4186591.83	648685.45_4186591.83	0.14341	0.81904	0.15733	0.0268	0.99046	8.52156	0.36623	0.11906
648705.45	4186591.83	648705.45_4186591.83	0.14417	0.78798	0.15637	0.02669	1.00521	7.95185	0.36326	0.11842
648725.45	4186591.83	648725.45_4186591.83	0.14499	0.75892	0.15519	0.02653	1.0195	7.37456	0.36018	0.11774
648245.45	4186611.83	648245.45_4186611.83	0.12418	3.63957	0.16603	0.02569	0.57016	4.29086	0.41296	0.12837
648265.45	4186611.83	648265.45_4186611.83	0.12511	3.23016	0.16516	0.02543	0.58579	4.42668	0.41069	0.12828
648285.45	4186611.83	648285.45_4186611.83	0.12609	2.89957	0.16424	0.02519	0.60271	4.58571	0.40847	0.12816
648305.45	4186611.83	648305.45_4186611.83	0.12709	2.62494	0.16328	0.02499	0.62235	4.76314	0.40616	0.12796
648325.45	4186611.83	648325.45_4186611.83	0.12801	2.38147	0.16255	0.02484	0.64441	4.92986	0.40342	0.12772
648345.45	4186611.83	648345.45_4186611.83	0.1289	2.16757	0.16192	0.02473	0.66832	5.09175	0.4004	0.12742
648365.45	4186611.83	648365.45_4186611.83	0.12986	1.98925	0.16131	0.02468	0.69283	5.27507	0.39738	0.12705
648385.45	4186611.83	648385.45_4186611.83	0.13088	1.84098	0.1607	0.02468	0.71588	5.4756	0.39437	0.1266
648405.45	4186611.83	648405.45_4186611.83	0.13185	1.70821	0.16036	0.02474	0.73541	5.6413	0.39097	0.12613
648425.45	4186611.83	648425.45_4186611.83	0.1329	1.59454	0.16001	0.02485	0.75345	5.82475	0.3877	0.12559
648445.45	4186611.83	648445.45_4186611.83	0.13404	1.49737	0.15967	0.025	0.77203	6.0273	0.38461	0.12502
648585.45	4186611.83	648585.45_4186611.83	0.14184	1.02935	0.1576	0.02636	0.94967	7.24187	0.36689	0.12038
648605.45	4186611.83	648605.45_4186611.83	0.14279	0.98043	0.15733	0.0265	0.97604	7.27159	0.36469	0.11977
648625.45	4186611.83	648625.45_4186611.83	0.1437	0.93667	0.15673	0.02658	1.00188	7.29035	0.36263	0.11911
648645.45	4186611.83	648645.45_4186611.83	0.14455	0.89623	0.15602	0.02661	1.02501	7.21074	0.36047	0.11844
648665.45	4186611.83	648665.45_4186611.83	0.14534	0.85817	0.15542	0.02661	1.04363	6.94805	0.35798	0.11785
648685.45	4186611.83	648685.45_4186611.83	0.14611	0.823	0.15462	0.02655	1.06054	6.58915	0.35538	0.11722
648705.45	4186611.83	648705.45_4186611.83	0.14691	0.79036	0.15369	0.02644	1.07591	6.1765	0.3526	0.1166
648725.45	4186611.83	648725.45_4186611.83	0.14776	0.75974	0.15254	0.02626	1.09065	5.81004	0.34973	0.11593
648265.45	4186631.83	648265.45_4186631.83	0.12704	3.84834	0.16203	0.02512	0.61388	4.05897	0.39795	0.12648
648285.45	4186631.83	648285.45_4186631.83	0.12807	3.32779	0.16115	0.0249	0.63238	4.18908	0.39572	0.12633
648305.45	4186631.83	648305.45_4186631.83	0.12911	2.93434	0.16028	0.02471	0.65323	4.33244	0.39341	0.12612
648325.45	4186631.83	648325.45_4186631.83	0.13009	2.61612	0.15948	0.02457	0.6771	4.47674	0.39083	0.12583
648345.45	4186631.83	648345.45_4186631.83	0.13104	2.34901	0.1589	0.02449	0.70332	4.61118	0.38791	0.12552
648365.45	4186631.83	648365.45_4186631.83	0.13202	2.13054	0.15833	0.02446	0.73047	4.75506	0.38494	0.12513
648385.45	4186631.83	648385.45_4186631.83	0.13304	1.95291	0.15777	0.02447	0.75629	4.90985	0.38194	0.12466
648405.45	4186631.83	648405.45_4186631.83	0.13402	1.79719	0.15746	0.02455	0.7785	5.0357	0.37862	0.12417
648425.45	4186631.83	648425.45_4186631.83	0.13514	1.66954	0.1571	0.02467	0.79936	5.18658	0.37555	0.12364

648445.45	4186631.83	648445.45_4186631.83	0.13629	1.56043	0.15676	0.02483	0.82034	5.33838	0.37255	0.12305
648585.45	4186631.83	648585.45_4186631.83	0.1444	1.04622	0.15494	0.02618	1.02146	6.06933	0.3557	0.11852
648605.45	4186631.83	648605.45_4186631.83	0.1454	0.99454	0.15459	0.0263	1.05079	6.04914	0.35372	0.11789
648625.45	4186631.83	648625.45_4186631.83	0.14637	0.94834	0.1539	0.02636	1.07931	6.01108	0.35187	0.11721
648645.45	4186631.83	648645.45_4186631.83	0.14726	0.9051	0.15338	0.0264	1.1024	5.84766	0.34977	0.11662
648665.45	4186631.83	648665.45_4186631.83	0.1481	0.86479	0.15275	0.02638	1.1222	5.60416	0.3475	0.11603
648685.45	4186631.83	648685.45_4186631.83	0.1489	0.82734	0.15199	0.02631	1.13941	5.30605	0.34504	0.11542
648705.45	4186631.83	648705.45_4186631.83	0.14977	0.79295	0.15103	0.02618	1.15596	5.02595	0.34254	0.11481
648725.45	4186631.83	648725.45_4186631.83	0.15064	0.7601	0.15006	0.026	1.16934	4.74709	0.33974	0.1142
648265.45	4186651.83	648265.45_4186651.83	0.12907	4.79926	0.15887	0.02481	0.64461	3.7461	0.38605	0.12468
648285.45	4186651.83	648285.45_4186651.83	0.13013	3.92255	0.15813	0.02461	0.66518	3.84694	0.38369	0.12453
648305.45	4186651.83	648305.45_4186651.83	0.13115	3.32551	0.15737	0.02444	0.68716	3.95315	0.38122	0.1243
648325.45	4186651.83	648325.45_4186651.83	0.13218	2.89495	0.15666	0.02432	0.71271	4.06557	0.37863	0.12402
648345.45	4186651.83	648345.45_4186651.83	0.13323	2.57004	0.15589	0.02425	0.74191	4.19286	0.37604	0.12363
648365.45	4186651.83	648365.45_4186651.83	0.13424	2.30218	0.15536	0.02424	0.77218	4.3079	0.37313	0.12322
648385.45	4186651.83	648385.45_4186651.83	0.13526	2.08392	0.15499	0.02428	0.80102	4.4141	0.37003	0.12279
648405.45	4186651.83	648405.45_4186651.83	0.13629	1.9044	0.15464	0.02437	0.82674	4.51884	0.3669	0.12228
648425.45	4186651.83	648425.45_4186651.83	0.13744	1.75743	0.15429	0.02451	0.8506	4.6345	0.36393	0.12173
648445.45	4186651.83	648445.45_4186651.83	0.13861	1.6344	0.15392	0.02467	0.87474	4.75102	0.36106	0.12111
648585.45	4186651.83	648585.45_4186651.83	0.14702	1.06531	0.15233	0.026	1.10343	5.15055	0.34504	0.11669
648605.45	4186651.83	648605.45_4186651.83	0.1481	1.01099	0.15191	0.0261	1.13616	5.10299	0.34329	0.11607
648625.45	4186651.83	648625.45_4186651.83	0.14912	0.96161	0.15125	0.02615	1.1666	5.02315	0.34159	0.1154
648645.45	4186651.83	648645.45_4186651.83	0.15006	0.91513	0.15081	0.02618	1.19008	4.84591	0.33959	0.11486
648665.45	4186651.83	648665.45_4186651.83	0.15094	0.87208	0.15018	0.02615	1.21059	4.63478	0.33745	0.11426
648685.45	4186651.83	648685.45_4186651.83	0.1518	0.83225	0.14942	0.02606	1.22855	4.40807	0.33521	0.11367
648705.45	4186651.83	648705.45_4186651.83	0.15273	0.79557	0.14844	0.02592	1.2458	4.21044	0.33293	0.11305
648725.45	4186651.83	648725.45_4186651.83	0.1536	0.76011	0.14764	0.02574	1.25699	3.98705	0.33015	0.1125
648285.45	4186671.83	648285.45_4186671.83	0.13222	4.7468	0.15518	0.02433	0.70083	3.54151	0.3722	0.12275
648305.45	4186671.83	648305.45_4186671.83	0.13324	3.82613	0.15453	0.02418	0.72463	3.61806	0.36958	0.12248
648325.45	4186671.83	648325.45_4186671.83	0.13437	3.2545	0.15383	0.02408	0.75257	3.714	0.36714	0.1222
648345.45	4186671.83	648345.45_4186671.83	0.13545	2.83249	0.15318	0.02403	0.78436	3.81026	0.36452	0.12183
648365.45	4186671.83	648365.45_4186671.83	0.13651	2.50636	0.15254	0.02403	0.8183	3.9086	0.36179	0.12135
648385.45	4186671.83	648385.45_4186671.83	0.13756	2.24275	0.15225	0.02409	0.85114	3.98718	0.35873	0.12093
648405.45	4186671.83	648405.45_4186671.83	0.13865	2.03383	0.15189	0.0242	0.8811	4.07194	0.35574	0.12041
648425.45	4186671.83	648425.45_4186671.83	0.13981	1.8625	0.15156	0.02434	0.90856	4.15806	0.35286	0.11985
648565.45	4186671.83	648565.45_4186671.83	0.14859	1.15359	0.14992	0.02567	1.16135	4.48265	0.33676	0.11547
648585.45	4186671.83	648585.45_4186671.83	0.14975	1.08768	0.14974	0.02582	1.1984	4.42466	0.33496	0.1149
648605.45	4186671.83	648605.45_4186671.83	0.15091	1.03006	0.14927	0.0259	1.23476	4.36329	0.33341	0.11428
648625.45	4186671.83	648625.45_4186671.83	0.15198	0.97653	0.14876	0.02595	1.26571	4.25492	0.33175	0.11368
648645.45	4186671.83	648645.45_4186671.83	0.15295	0.92625	0.14831	0.02596	1.29001	4.09398	0.32987	0.11313
648665.45	4186671.83	648665.45_4186671.83	0.15387	0.88003	0.14768	0.02592	1.31105	3.91985	0.32788	0.11254
648685.45	4186671.83	648685.45_4186671.83	0.15484	0.83769	0.14692	0.02582	1.33006	3.75393	0.32588	0.11197
648705.45	4186671.83	648705.45_4186671.83	0.15578	0.79808	0.14602	0.02567	1.34587	3.5957	0.32368	0.11138
648725.45	4186671.83	648725.45_4186671.83	0.15667	0.76021	0.14524	0.02547	1.35534	3.42476	0.32104	0.11082
648745.45	4186671.83	648745.45_4186671.83	0.15768	0.72565	0.14427	0.02523	1.36355	3.28575	0.31834	0.11025
648305.45	4186691.83	648305.45_4186691.83	0.13551	4.54656	0.15168	0.02393	0.76716	3.33478	0.35878	0.12075
648325.45	4186691.83	648325.45_4186691.83	0.13662	3.70984	0.15107	0.02385	0.79714	3.40306	0.3562	0.12042
648345.45	4186691.83	648345.45_4186691.83	0.13776	3.16356	0.1504	0.02381	0.83206	3.48221	0.35367	0.12001
648365.45	4186691.83	648365.45_4186691.83	0.13886	2.7488	0.14992	0.02384	0.86993	3.55194	0.35089	0.11957
648385.45	4186691.83	648385.45_4186691.83	0.13996	2.4367	0.14946	0.0239	0.9079	3.62318	0.34806	0.11907
648405.45	4186691.83	648405.45_4186691.83	0.14109	2.18769	0.14918	0.02403	0.94277	3.68543	0.34514	0.11856
648425.45	4186691.83	648425.45_4186691.83	0.14226	1.98686	0.14887	0.02418	0.97473	3.74902	0.34233	0.11799
648565.45	4186691.83	648565.45_4186691.83	0.15135	1.18258	0.14749	0.02551	1.26699	3.89979	0.32697	0.11374
648585.45	4186691.83	648585.45_4186691.83	0.15259	1.11246	0.1472	0.02563	1.30918	3.84063	0.32539	0.11315
648605.45	4186691.83	648605.45_4186691.83	0.15381	1.05027	0.14668	0.0257	1.34898	3.77284	0.32398	0.11252
648625.45	4186691.83	648625.45_4186691.83	0.15492	0.99165	0.14636	0.02575	1.37934	3.65296	0.32233	0.11199
648645.45	4186691.83	648645.45_4186691.83	0.15596	0.93788	0.14584	0.02574	1.40523	3.52181	0.32063	0.11143
648665.45	4186691.83	648665.45_4186691.83	0.15694	0.88806	0.14523	0.02569	1.42631	3.3806	0.3188	0.11085
648685.45	4186691.83	648685.45_4186691.83	0.15799	0.84288	0.14443	0.02558	1.44565	3.25692	0.317	0.11029
648705.45	4186691.83	648705.45_4186691.83	0.15893	0.79979	0.14371	0.02542	1.45747	3.11823	0.31478	0.10975
648725.45	4186691.83	648725.45_4186691.83	0.1599	0.76018	0.14287	0.02521	1.46577	2.99459	0.31239	0.1092
648745.45	4186691.83	648745.45_4186691.83	0.16095	0.72373	0.14195	0.02496	1.47058	2.88257	0.30984	0.10863
648225.45	4186711.83	648225.45_4186711.83	0.13248	6.73164	0.15204	0.02439	0.67671	2.82339	0.35654	0.11984
648325.45	4186711.83	648325.45_4186711.83	0.13895	4.33316	0.14834	0.02362	0.84728	3.12958	0.34581	0.11867
648345.45	4186711.83	648345.45_4186711.83	0.14009	3.55818	0.14786	0.02361	0.88533	3.18135	0.34311	0.11827
648365.45	4186711.83	648365.45_4186711.83	0.14126	3.03509	0.14738	0.02365	0.92808	3.23685	0.34044	0.11782
648385.45	4186711.83	648385.45_4186711.83	0.14241	2.65387	0.14697	0.02374	0.97185	3.29095	0.33769	0.11732
648405.45	4186711.83	648405.45_4186711.83	0.14359	2.36353	0.14653	0.02386	1.01292	3.34671	0.335	0.11674
648425.45	4186711.83	648425.45_4186711.83	0.14478	2.12739	0.14624	0.02402	1.05064	3.39369	0.33226	0.11617
648565.45	4186711.83	648565.45_4186711.83	0.1542	1.21321	0.14504	0.02534	1.39198	3.42367	0.31768	0.11203
648585.45	4186711.83	648585.45_4186711.83	0.15554	1.13838	0.14468	0.02544	1.43975	3.36683	0.31631	0.11144
648605.45	4186711.83	648605.45_4186711.83	0.15681	1.07024	0.14423	0.0255	1.48135	3.29245	0.31495	0.11083
648625.45	4186711.83	648625.45_4186711.83	0.15798	1.0065	0.14395	0.02554	1.51199	3.1827	0.31338	0.11033
648645.45	4186711.83	648645.45_4186711.83	0.15909	0.94852	0.14344	0.02552	1.53817	3.07333	0.31183	0.10978
648665.45	4186711.83	648665.45_4186711.83	0.16018	0.89523	0.14283	0.02546	1.55903	2.96252	0.31018	0.10923
648685.45	4186711.83	648685.45_4186711.83	0.16125	0.84667	0.14202	0.02533	1.57632	2.86295	0.30848	0.10866
648705.45	4186711.83	648705.45_4186711.83	0.16222	0.80065	0.1414	0.02517	1.58355	2.74681	0.30633	0.10815
648725.45	4186711.83	648725.45_4186711.83	0.16325	0.75904	0.14058	0.02495	1.58815	2.6496	0.3041	0.1076
648745.45	4186711.83	648745.45_4186711.83	0.16436	0.72091	0.13968	0.02469	1.58836	2.55925	0.30171	0.10705
648345.45	4186731.83	648345.45_4186731.83	0.14254	4.12307	0.14527	0.02342	0.94616	2.92337	0.3332	0.11653
648365.45	4186731.83	648365.45_4186731.83	0.14372	3.40529	0.14486	0.02347	0.99426	2.96134	0.33048	0.11607
648385.45	4186731.83	648385.45_4186731.83	0.14494	2.92481	0.14447	0.02357	1.04502	3.00375	0.32783	0.11557
648405.45	4186731.83	648405.45_4186731.83	0.14617	2.56875	0.14409	0.02371	1.09354	3.04446	0.32521	0.11501
648545.45	4186731.83	648545.45_4186731.83	0.15575	1.33721	0.14279	0.02502	1.4844	3.08277	0.31033	0.1109
648565.45	4186731.83	648565.45_4186731.83	0.15717	1.24378	0.14263	0.02516	1.54115	3.02962	0.30886	0.11035
648585.45	4186731.83	648585.45_4186731.83	0.15858	1.16278	0.14221	0.02525	1.59415	2.97543	0.30763	0.10975

648605.45	4186731.83	648605.45_4186731.83	0.15993	1.0882	0.14192	0.02531	1.63566	2.89794	0.3063	0.10922
648625.45	4186731.83	648625.45_4186731.83	0.16117	1.01939	0.14158	0.02534	1.66732	2.80713	0.30489	0.10871
648645.45	4186731.83	648645.45_4186731.83	0.16235	0.95677	0.1411	0.0253	1.69187	2.71415	0.30343	0.10817
648665.45	4186731.83	648665.45_4186731.83	0.16354	0.90037	0.14045	0.02522	1.71149	2.62862	0.30197	0.10763
648685.45	4186731.83	648685.45_4186731.83	0.16463	0.84822	0.13976	0.02509	1.72281	2.54042	0.30028	0.10709
648705.45	4186731.83	648705.45_4186731.83	0.16566	0.79987	0.13913	0.02492	1.72506	2.4484	0.29827	0.10658
648725.45	4186731.83	648725.45_4186731.83	0.16676	0.75645	0.13834	0.0247	1.72387	2.36999	0.29621	0.10605
648745.45	4186731.83	648745.45_4186731.83	0.16795	0.71704	0.13745	0.02443	1.71805	2.29709	0.29398	0.10552
648365.45	4186751.83	648365.45_4186751.83	0.14632	3.93768	0.14236	0.0233	1.0707	2.72413	0.32108	0.11436
648385.45	4186751.83	648385.45_4186751.83	0.14758	3.28719	0.14198	0.02341	1.12979	2.75464	0.31848	0.11384
648405.45	4186751.83	648405.45_4186751.83	0.14882	2.81726	0.14174	0.02356	1.18755	2.77748	0.31581	0.11331
648425.45	4186751.83	648425.45_4186751.83	0.15012	2.47936	0.14142	0.02373	1.2426	2.80418	0.31336	0.11272
648545.45	4186751.83	648545.45_4186751.83	0.15872	1.37172	0.14054	0.02486	1.65519	2.74573	0.3017	0.10927
648565.45	4186751.83	648565.45_4186751.83	0.16025	1.27204	0.14028	0.02498	1.72075	2.69984	0.30044	0.10871
648585.45	4186751.83	648585.45_4186751.83	0.16173	1.18347	0.13987	0.02506	1.77731	2.64724	0.2993	0.10812
648605.45	4186751.83	648605.45_4186751.83	0.16315	1.10255	0.13954	0.02511	1.82007	2.58012	0.2981	0.10759
648625.45	4186751.83	648625.45_4186751.83	0.16451	1.0289	0.13921	0.02512	1.85056	2.50401	0.29683	0.1071
648645.45	4186751.83	648645.45_4186751.83	0.16578	0.96177	0.13878	0.02508	1.8708	2.42419	0.29545	0.10659
648665.45	4186751.83	648665.45_4186751.83	0.16699	0.90179	0.1381	0.02499	1.88538	2.35395	0.29409	0.10603
648685.45	4186751.83	648685.45_4186751.83	0.16814	0.84649	0.1376	0.02486	1.88693	2.27386	0.2924	0.10557
648705.45	4186751.83	648705.45_4186751.83	0.16925	0.79659	0.13692	0.02467	1.88255	2.2024	0.29059	0.10505
648725.45	4186751.83	648725.45_4186751.83	0.17042	0.7518	0.13616	0.02444	1.87282	2.13739	0.28864	0.10453
648745.45	4186751.83	648745.45_4186751.83	0.17167	0.71172	0.13522	0.02416	1.85961	2.07942	0.2866	0.10398
648765.45	4186751.83	648765.45_4186751.83	0.17294	0.67501	0.13437	0.02385	1.83856	2.01786	0.28421	0.10348
648365.45	4186771.83	648365.45_4186771.83	0.14897	4.72287	0.13986	0.02312	1.15872	2.5142	0.31211	0.11263
648385.45	4186771.83	648385.45_4186771.83	0.15025	3.74722	0.13966	0.02326	1.22874	2.52822	0.30939	0.11216
648405.45	4186771.83	648405.45_4186771.83	0.15159	3.13846	0.13938	0.02342	1.29897	2.54627	0.3069	0.11162
648425.45	4186771.83	648425.45_4186771.83	0.15294	2.71023	0.13907	0.02359	1.36703	2.56341	0.30456	0.11103
648525.45	4186771.83	648525.45_4186771.83	0.16021	1.53261	0.13844	0.02455	1.78341	2.5014	0.29481	0.1082
648545.45	4186771.83	648545.45_4186771.83	0.16183	1.40573	0.13826	0.0247	1.86628	2.46429	0.29352	0.10765
648565.45	4186771.83	648565.45_4186771.83	0.16346	1.29723	0.13794	0.02481	1.94004	2.42383	0.29245	0.1071
648585.45	4186771.83	648585.45_4186771.83	0.16501	1.19879	0.13769	0.02488	1.99557	2.36904	0.2913	0.10658
648605.45	4186771.83	648605.45_4186771.83	0.1665	1.11029	0.13743	0.02492	2.03462	2.30654	0.29014	0.10608
648625.45	4186771.83	648625.45_4186771.83	0.16795	1.03213	0.137	0.02492	2.06225	2.24579	0.28902	0.10556
648645.45	4186771.83	648645.45_4186771.83	0.1693	0.9619	0.13643	0.02486	2.07832	2.18543	0.28785	0.10501
648665.45	4186771.83	648665.45_4186771.83	0.17058	0.89854	0.1359	0.02476	2.08128	2.1214	0.2865	0.10452
648685.45	4186771.83	648685.45_4186771.83	0.17182	0.84151	0.13539	0.02462	2.0728	2.05669	0.28494	0.10405
648705.45	4186771.83	648705.45_4186771.83	0.17302	0.79037	0.13475	0.02443	2.05693	1.99708	0.28325	0.10356
648725.45	4186771.83	648725.45_4186771.83	0.17425	0.74488	0.13401	0.02419	2.03569	1.94227	0.28141	0.10304
648745.45	4186771.83	648745.45_4186771.83	0.17553	0.70424	0.13309	0.0239	2.01123	1.89263	0.27947	0.10249
648765.45	4186771.83	648765.45_4186771.83	0.17685	0.66718	0.13234	0.02359	1.9775	1.83721	0.27713	0.10202
648385.45	4186791.83	648385.45_4186791.83	0.15309	4.44969	0.13724	0.0231	1.34574	2.33589	0.30093	0.11048
648405.45	4186791.83	648405.45_4186791.83	0.15447	3.56372	0.13699	0.02327	1.43253	2.34504	0.29848	0.10994
648425.45	4186791.83	648425.45_4186791.83	0.15585	2.979	0.13681	0.02345	1.51891	2.34894	0.29612	0.10939
648445.45	4186791.83	648445.45_4186791.83	0.15726	2.55518	0.13666	0.02365	1.60963	2.34682	0.29389	0.10883
648525.45	4186791.83	648525.45_4186791.83	0.16344	1.58227	0.13618	0.0244	2.03781	2.26549	0.28702	0.10662
648545.45	4186791.83	648545.45_4186791.83	0.16511	1.44053	0.13595	0.02453	2.13254	2.23021	0.28584	0.10607
648565.45	4186791.83	648565.45_4186791.83	0.16677	1.31693	0.13574	0.02463	2.20712	2.18616	0.28473	0.10555
648585.45	4186791.83	648585.45_4186791.83	0.16839	1.20759	0.13556	0.0247	2.25811	2.13341	0.28361	0.10506
648605.45	4186791.83	648605.45_4186791.83	0.16998	1.11283	0.13526	0.02473	2.29172	2.08122	0.28259	0.10456
648625.45	4186791.83	648625.45_4186791.83	0.17151	1.02924	0.13488	0.02471	2.30797	2.02696	0.28152	0.10407
648645.45	4186791.83	648645.45_4186791.83	0.17298	0.95616	0.13432	0.02464	2.31261	1.97743	0.28047	0.10354
648665.45	4186791.83	648665.45_4186791.83	0.17435	0.89045	0.13385	0.02454	2.30019	1.92234	0.27918	0.10307
648685.45	4186791.83	648685.45_4186791.83	0.17565	0.83248	0.13325	0.02438	2.27865	1.87186	0.27779	0.10258
648705.45	4186791.83	648705.45_4186791.83	0.17693	0.78111	0.13253	0.02417	2.24978	1.82508	0.27626	0.10206
648725.45	4186791.83	648725.45_4186791.83	0.17822	0.73537	0.13183	0.02393	2.21331	1.77766	0.27452	0.10156
648745.45	4186791.83	648745.45_4186791.83	0.17956	0.69451	0.13107	0.02364	2.17196	1.73074	0.2726	0.10107
648765.45	4186791.83	648765.45_4186791.83	0.18096	0.65766	0.13032	0.02333	2.12606	1.68428	0.27041	0.10059
648405.45	4186811.83	648405.45_4186811.83	0.15743	4.0732	0.13479	0.02313	1.59647	2.15978	0.29029	0.10833
648425.45	4186811.83	648425.45_4186811.83	0.15883	3.26772	0.13468	0.02333	1.70906	2.154	0.28795	0.1078
648445.45	4186811.83	648445.45_4186811.83	0.16032	2.74204	0.13451	0.02352	1.82881	2.14758	0.28588	0.10725
648465.45	4186811.83	648465.45_4186811.83	0.16184	2.35089	0.13435	0.02372	1.96159	2.13534	0.284	0.10669
648485.45	4186811.83	648485.45_4186811.83	0.16341	2.05442	0.13413	0.0239	2.10196	2.11876	0.28236	0.1061
648505.45	4186811.83	648505.45_4186811.83	0.16506	1.81783	0.13407	0.02408	2.23804	2.0911	0.28084	0.10558
648525.45	4186811.83	648525.45_4186811.83	0.16674	1.62642	0.13397	0.02424	2.36151	2.05881	0.2795	0.10506
648545.45	4186811.83	648545.45_4186811.83	0.16847	1.46571	0.13384	0.02437	2.46211	2.02127	0.27833	0.10455
648565.45	4186811.83	648565.45_4186811.83	0.17015	1.32748	0.13369	0.02446	2.53205	1.9776	0.27722	0.10405
648585.45	4186811.83	648585.45_4186811.83	0.1719	1.2108	0.13343	0.02452	2.57689	1.9351	0.27629	0.10356
648605.45	4186811.83	648605.45_4186811.83	0.17358	1.10934	0.13314	0.02453	2.59563	1.88921	0.27534	0.10308
648625.45	4186811.83	648625.45_4186811.83	0.17524	1.02177	0.13277	0.0245	2.59503	1.84392	0.27439	0.1026
648645.45	4186811.83	648645.45_4186811.83	0.17679	0.94581	0.13221	0.02442	2.5799	1.80185	0.27342	0.10208
648665.45	4186811.83	648665.45_4186811.83	0.17823	0.87804	0.13185	0.02431	2.54357	1.75216	0.27215	0.10165
648685.45	4186811.83	648685.45_4186811.83	0.17961	0.81944	0.13128	0.02415	2.50068	1.70896	0.27083	0.10117
648705.45	4186811.83	648705.45_4186811.83	0.181	0.76832	0.13061	0.02394	2.45262	1.66962	0.26941	0.10068
648725.45	4186811.83	648725.45_4186811.83	0.18235	0.72299	0.1298	0.02368	2.40099	1.63212	0.26784	0.10014
648745.45	4186811.83	648745.45_4186811.83	0.18378	0.68244	0.12909	0.02339	2.34283	1.5914	0.26601	0.09966
648765.45	4186811.83	648765.45_4186811.83	0.18526	0.64616	0.12828	0.02307	2.28415	1.55318	0.264	0.09917
648785.45	4186811.83	648785.45_4186811.83	0.18684	0.61349	0.12746	0.02272	2.22466	1.51787	0.26176	0.09869
648405.45	4186831.83	648405.45_4186831.83	0.16048	4.6985	0.13262	0.023	1.80208	1.99449	0.28249	0.10675
648425.45	4186831.83	648425.45_4186831.83	0.16198	3.6124	0.13251	0.02319	1.95457	1.9848	0.28027	0.10622
648445.45	4186831.83	648445.45_4186831.83	0.16353	2.94917	0.13229	0.02338	2.11778	1.97515	0.27834	0.10566
648465.45	4186831.83	648465.45_4186831.83	0.1651	2.47701	0.13217	0.02358	2.29423	1.95803	0.27653	0.10511
648485.45	4186831.83	648485.45_4186831.83	0.16671	2.13619	0.13199	0.02376	2.47345	1.93763	0.27496	0.10455
648505.45	4186831.83	648505.45_4186831.83	0.16838	1.86672	0.13203	0.02394	2.638	1.90593	0.27343	0.10407
648525.45	4186831.83	648525.45_4186831.83	0.1701	1.6542	0.13192	0.02409	2.77713	1.87402	0.27217	0.10356
648545.45	4186831.83	648545.45_4186831.83	0.17191	1.47918	0.13177	0.0242	2.8794	1.84041	0.27112	0.10306

648565.45	4186831.83	648565.45_4186831.83	0.17375	1.33187	0.13158	0.02429	2.93988	1.80446	0.27018	0.10257
648585.45	4186831.83	648585.45_4186831.83	0.17557	1.2065	0.13135	0.02433	2.96189	1.76561	0.2693	0.1021
648605.45	4186831.83	648605.45_4186831.83	0.17737	1.09994	0.13107	0.02434	2.9542	1.72577	0.26844	0.10163
648625.45	4186831.83	648625.45_4186831.83	0.17914	1.00962	0.13067	0.0243	2.92581	1.68779	0.26758	0.10116
648645.45	4186831.83	648645.45_4186831.83	0.18079	0.93137	0.13024	0.02421	2.87798	1.64873	0.26662	0.10068
648665.45	4186831.83	648665.45_4186831.83	0.18228	0.86281	0.12984	0.02409	2.81259	1.60692	0.26543	0.10023
648685.45	4186831.83	648685.45_4186831.83	0.18378	0.80437	0.12927	0.02391	2.74423	1.57126	0.26422	0.09976
648705.45	4186831.83	648705.45_4186831.83	0.18526	0.7534	0.12863	0.02369	2.67214	1.53743	0.26289	0.09928
648725.45	4186831.83	648725.45_4186831.83	0.1867	0.70842	0.12788	0.02343	2.5988	1.50453	0.26141	0.09877
648745.45	4186831.83	648745.45_4186831.83	0.18818	0.66807	0.12725	0.02314	2.51927	1.46731	0.25959	0.09832
648765.45	4186831.83	648765.45_4186831.83	0.18975	0.63235	0.12645	0.02282	2.44468	1.43445	0.25771	0.09783
648785.45	4186831.83	648785.45_4186831.83	0.19141	0.60037	0.12554	0.02247	2.37408	1.40588	0.25566	0.09732
648425.45	4186851.83	648425.45_4186851.83	0.16524	3.96559	0.13039	0.02306	2.28385	1.83257	0.2729	0.10468
648445.45	4186851.83	648445.45_4186851.83	0.16681	3.12123	0.13028	0.02326	2.51603	1.81572	0.27095	0.10414
648465.45	4186851.83	648465.45_4186851.83	0.16844	2.57951	0.13017	0.02345	2.75401	1.79666	0.26925	0.10361
648485.45	4186851.83	648485.45_4186851.83	0.17015	2.20299	0.12994	0.02362	2.98451	1.77736	0.26785	0.10306
648505.45	4186851.83	648505.45_4186851.83	0.17187	1.90278	0.12996	0.02379	3.18278	1.74724	0.26643	0.10259
648525.45	4186851.83	648525.45_4186851.83	0.17369	1.66934	0.12986	0.02393	3.32998	1.71777	0.26528	0.10209
648545.45	4186851.83	648545.45_4186851.83	0.17558	1.47999	0.12971	0.02404	3.41537	1.68697	0.26431	0.1016
648565.45	4186851.83	648565.45_4186851.83	0.17752	1.32376	0.12953	0.02411	3.44313	1.65475	0.26346	0.10113
648585.45	4186851.83	648585.45_4186851.83	0.17943	1.19267	0.12931	0.02415	3.42318	1.61968	0.26263	0.10067
648605.45	4186851.83	648605.45_4186851.83	0.18134	1.08353	0.12903	0.02414	3.37199	1.58506	0.26185	0.10021
648625.45	4186851.83	648625.45_4186851.83	0.18319	0.99208	0.12861	0.02409	3.30084	1.55254	0.26106	0.09973
648645.45	4186851.83	648645.45_4186851.83	0.1849	0.91235	0.12832	0.024	3.20526	1.51464	0.26004	0.09931
648665.45	4186851.83	648665.45_4186851.83	0.18654	0.84492	0.12787	0.02386	3.10602	1.48152	0.25901	0.09885
648685.45	4186851.83	648685.45_4186851.83	0.18814	0.78686	0.12732	0.02368	3.00461	1.45073	0.25787	0.0984
648705.45	4186851.83	648705.45_4186851.83	0.18973	0.73666	0.12665	0.02345	2.90664	1.42298	0.25668	0.09791
648725.45	4186851.83	648725.45_4186851.83	0.19124	0.69182	0.12605	0.02319	2.80411	1.39134	0.25517	0.09745
648745.45	4186851.83	648745.45_4186851.83	0.19279	0.65213	0.12537	0.02289	2.70525	1.36008	0.2535	0.09697
648765.45	4186851.83	648765.45_4186851.83	0.19442	0.6169	0.12461	0.02257	2.61181	1.33068	0.25168	0.09649
648785.45	4186851.83	648785.45_4186851.83	0.1962	0.58561	0.12374	0.02222	2.52669	1.30584	0.24976	0.096
648805.45	4186851.83	648805.45_4186851.83	0.19803	0.55724	0.12286	0.02186	2.44389	1.28274	0.24755	0.09552
648425.45	4186871.83	648425.45_4186871.83	0.1686	4.31066	0.12828	0.02293	2.74616	1.69722	0.26588	0.10315
648445.45	4186871.83	648445.45_4186871.83	0.17021	3.27646	0.12825	0.02313	3.09399	1.6756	0.26393	0.10264
648465.45	4186871.83	648465.45_4186871.83	0.17193	2.66602	0.12815	0.02332	3.4215	1.65568	0.26233	0.10213
648485.45	4186871.83	648485.45_4186871.83	0.17373	2.24539	0.12795	0.02348	3.71364	1.63603	0.26104	0.1016
648505.45	4186871.83	648505.45_4186871.83	0.17553	1.91525	0.12795	0.02364	3.93535	1.60831	0.25974	0.10113
648525.45	4186871.83	648525.45_4186871.83	0.17739	1.66118	0.12786	0.02377	4.05962	1.58009	0.25865	0.10065
648545.45	4186871.83	648545.45_4186871.83	0.17938	1.46135	0.12772	0.02387	4.09289	1.552	0.25776	0.10018
648565.45	4186871.83	648565.45_4186871.83	0.18143	1.30157	0.12747	0.02393	4.05811	1.52485	0.25703	0.09972
648585.45	4186871.83	648585.45_4186871.83	0.18346	1.16914	0.12722	0.02395	3.97125	1.49487	0.25631	0.09925
648605.45	4186871.83	648605.45_4186871.83	0.18548	1.05928	0.127	0.02394	3.85066	1.46278	0.25554	0.09883
648625.45	4186871.83	648625.45_4186871.83	0.18742	0.96804	0.12665	0.02388	3.71594	1.43286	0.25476	0.09837
648645.45	4186871.83	648645.45_4186871.83	0.18925	0.88965	0.12638	0.02378	3.56554	1.40006	0.25381	0.09796
648665.45	4186871.83	648665.45_4186871.83	0.19101	0.82364	0.12594	0.02364	3.42078	1.37183	0.25286	0.09751
648685.45	4186871.83	648685.45_4186871.83	0.19272	0.76674	0.12542	0.02345	3.28057	1.34519	0.25179	0.09706
648705.45	4186871.83	648705.45_4186871.83	0.1944	0.71749	0.12476	0.02321	3.15037	1.32089	0.25066	0.09658
648725.45	4186871.83	648725.45_4186871.83	0.19597	0.6733	0.12422	0.02295	3.01746	1.29182	0.24919	0.09613
648745.45	4186871.83	648745.45_4186871.83	0.19762	0.63459	0.12355	0.02265	2.89667	1.26488	0.24764	0.09566
648765.45	4186871.83	648765.45_4186871.83	0.19936	0.60029	0.1228	0.02232	2.78497	1.23944	0.2459	0.09519
648785.45	4186871.83	648785.45_4186871.83	0.20123	0.56986	0.12191	0.02197	2.68502	1.21788	0.2441	0.09469
648805.45	4186871.83	648805.45_4186871.83	0.20314	0.54216	0.12117	0.02162	2.58426	1.19534	0.24192	0.09426
648445.45	4186891.83	648445.45_4186891.83	0.1738	3.40697	0.12627	0.023	3.99152	1.5519	0.25725	0.10119
648465.45	4186891.83	648465.45_4186891.83	0.17563	2.72473	0.12615	0.02318	4.44119	1.53246	0.25579	0.10069
648485.45	4186891.83	648485.45_4186891.83	0.17746	2.2515	0.12599	0.02334	4.78509	1.51156	0.25452	0.10018
648505.45	4186891.83	648505.45_4186891.83	0.17935	1.89697	0.12597	0.02349	4.98227	1.4861	0.25333	0.09972
648525.45	4186891.83	648525.45_4186891.83	0.18127	1.62869	0.12591	0.02362	5.0193	1.45929	0.2523	0.09925
648545.45	4186891.83	648545.45_4186891.83	0.18332	1.42331	0.12578	0.0237	4.9388	1.43298	0.25146	0.09879
648565.45	4186891.83	648565.45_4186891.83	0.18549	1.26303	0.12557	0.02376	4.78912	1.40788	0.25078	0.09836
648585.45	4186891.83	648585.45_4186891.83	0.18763	1.13305	0.12531	0.02377	4.59708	1.3817	0.25013	0.0979
648605.45	4186891.83	648605.45_4186891.83	0.18975	1.02618	0.12502	0.02374	4.3856	1.35488	0.24946	0.09745
648625.45	4186891.83	648625.45_4186891.83	0.19184	0.93686	0.12481	0.02368	4.16445	1.32612	0.24867	0.09706
648645.45	4186891.83	648645.45_4186891.83	0.19379	0.8616	0.12448	0.02357	3.95027	1.29907	0.24782	0.09663
648665.45	4186891.83	648665.45_4186891.83	0.19569	0.79804	0.12406	0.02342	3.752	1.27478	0.24694	0.0962
648685.45	4186891.83	648685.45_4186891.83	0.19755	0.74349	0.12352	0.02322	3.57041	1.2525	0.24598	0.09575
648705.45	4186891.83	648705.45_4186891.83	0.19929	0.69557	0.12296	0.02298	3.40005	1.22943	0.24485	0.09529
648725.45	4186891.83	648725.45_4186891.83	0.20096	0.65302	0.12241	0.02271	3.23787	1.20414	0.24347	0.09484
648745.45	4186891.83	648745.45_4186891.83	0.20273	0.61585	0.12175	0.0224	3.09401	1.18076	0.24202	0.09438
648765.45	4186891.83	648765.45_4186891.83	0.20459	0.58299	0.12098	0.02207	2.96446	1.15902	0.24041	0.0939
648785.45	4186891.83	648785.45_4186891.83	0.20652	0.5535	0.12017	0.02172	2.84497	1.13865	0.23862	0.09342
648805.45	4186891.83	648805.45_4186891.83	0.20851	0.52679	0.11946	0.02138	2.72851	1.11805	0.23654	0.093
648825.45	4186891.83	648825.45_4186891.83	0.21064	0.50294	0.11862	0.02103	2.62577	1.1017	0.23432	0.09256
648445.45	4186911.83	648445.45_4186911.83	0.17754	3.48223	0.12434	0.02287	5.50562	1.44146	0.25086	0.09976
648465.45	4186911.83	648465.45_4186911.83	0.17941	2.71446	0.12425	0.02305	6.0832	1.42077	0.24941	0.09927
648485.45	4186911.83	648485.45_4186911.83	0.18135	2.20645	0.12413	0.02321	6.38532	1.40019	0.24823	0.09879
648505.45	4186911.83	648505.45_4186911.83	0.18333	1.84423	0.124	0.02334	6.42716	1.37861	0.24721	0.09831
648525.45	4186911.83	648525.45_4186911.83	0.18534	1.57177	0.12399	0.02346	6.26105	1.35287	0.24622	0.09788
648545.45	4186911.83	648545.45_4186911.83	0.18747	1.36893	0.12388	0.02354	5.97592	1.3286	0.24543	0.09744
648565.45	4186911.83	648565.45_4186911.83	0.18971	1.21167	0.12372	0.02358	5.64051	1.30442	0.24476	0.09702
648585.45	4186911.83	648585.45_4186911.83	0.19199	1.08721	0.12346	0.02358	5.29856	1.28147	0.24419	0.09658
648605.45	4186911.83	648605.45_4186911.83	0.19425	0.98487	0.12318	0.02355	4.96311	1.25766	0.24357	0.09615
648625.45	4186911.83	648625.45_4186911.83	0.19644	0.89916	0.12298	0.02348	4.64073	1.23212	0.24282	0.09576
648645.45	4186911.83	648645.45_4186911.83	0.19856	0.8281	0.12264	0.02336	4.35257	1.20953	0.24207	0.09534
648665.45	4186911.83	648665.45_4186911.83	0.20061	0.76791	0.12222	0.02319	4.09432	1.18855	0.24125	0.09491
648685.45	4186911.83	648685.45_4186911.83	0.20257	0.71647	0.12165	0.02298	3.86806	1.16976	0.24039	0.09445
648705.45	4186911.83	648705.45_4186911.83	0.20442	0.67087	0.1212	0.02275	3.65261	1.14749	0.23925	0.09403

648725.45	4186911.83	648725.45_4186911.83	0.20621	0.63096	0.12064	0.02247	3.46191	1.12587	0.23797	0.09357
648745.45	4186911.83	648745.45_4186911.83	0.2081	0.59592	0.11999	0.02216	3.29391	1.10536	0.2366	0.09312
648765.45	4186911.83	648765.45_4186911.83	0.21006	0.56482	0.11919	0.02182	3.14633	1.08665	0.23511	0.09263
648785.45	4186911.83	648785.45_4186911.83	0.2121	0.53669	0.11851	0.02148	3.00493	1.06697	0.23332	0.0922
648805.45	4186911.83	648805.45_4186911.83	0.21421	0.5113	0.11778	0.02114	2.87571	1.04908	0.23135	0.09176
648825.45	4186911.83	648825.45_4186911.83	0.21648	0.48854	0.11695	0.02079	2.76145	1.03458	0.22925	0.09133
648445.45	4186931.83	648445.45_4186931.83	0.1814	3.45072	0.12245	0.02274	8.27384	1.34239	0.24472	0.09837
648465.45	4186931.83	648465.45_4186931.83	0.18334	2.62657	0.12238	0.02292	8.78227	1.32132	0.24331	0.09788
648485.45	4186931.83	648485.45_4186931.83	0.18539	2.10996	0.12229	0.02307	8.75302	1.30164	0.24221	0.09743
648505.45	4186931.83	648505.45_4186931.83	0.18746	1.75529	0.12211	0.02319	8.3822	1.28243	0.2413	0.09695
648525.45	4186931.83	648525.45_4186931.83	0.18961	1.49421	0.1221	0.0233	7.82672	1.2592	0.24041	0.09655
648545.45	4186931.83	648545.45_4186931.83	0.19185	1.30108	0.12197	0.02337	7.2098	1.23725	0.2397	0.09612
648565.45	4186931.83	648565.45_4186931.83	0.19417	1.15185	0.1218	0.0234	6.60992	1.21525	0.23909	0.09569
648585.45	4186931.83	648585.45_4186931.83	0.19655	1.03321	0.12159	0.02339	6.06092	1.19341	0.23852	0.09528
648605.45	4186931.83	648605.45_4186931.83	0.19894	0.93677	0.12136	0.02335	5.57182	1.17174	0.23792	0.09487
648625.45	4186931.83	648625.45_4186931.83	0.20131	0.85672	0.12115	0.02327	5.13755	1.14981	0.23725	0.09448
648645.45	4186931.83	648645.45_4186931.83	0.20359	0.79032	0.12081	0.02314	4.76522	1.1302	0.23657	0.09407
648665.45	4186931.83	648665.45_4186931.83	0.20578	0.73432	0.12039	0.02297	4.44364	1.11202	0.23582	0.09364
648685.45	4186931.83	648685.45_4186931.83	0.20785	0.68626	0.11988	0.02275	4.16385	1.09448	0.23498	0.0932
648705.45	4186931.83	648705.45_4186931.83	0.20981	0.644	0.11946	0.02251	3.90681	1.07439	0.23386	0.09278
648725.45	4186931.83	648725.45_4186931.83	0.21176	0.60724	0.1189	0.02223	3.68713	1.05568	0.23269	0.09234
648745.45	4186931.83	648745.45_4186931.83	0.21376	0.57471	0.11827	0.02192	3.49405	1.03735	0.23138	0.09189
648765.45	4186931.83	648765.45_4186931.83	0.21581	0.54567	0.11749	0.02158	3.3267	1.02061	0.22998	0.0914
648785.45	4186931.83	648785.45_4186931.83	0.21795	0.51921	0.11688	0.02125	3.16436	1.00205	0.22821	0.09099
648805.45	4186931.83	648805.45_4186931.83	0.22021	0.49541	0.11613	0.0209	3.02316	0.98657	0.22634	0.09055
648825.45	4186931.83	648825.45_4186931.83	0.22264	0.47397	0.11529	0.02056	2.89939	0.97412	0.22437	0.09012
648445.45	4186951.83	648445.45_4186951.83	0.18542	3.26789	0.1206	0.02261	13.41259	1.25376	0.23883	0.09701
648465.45	4186951.83	648465.45_4186951.83	0.18746	2.45882	0.12056	0.02278	13.13718	1.23304	0.23748	0.09654
648485.45	4186951.83	648485.45_4186951.83	0.18964	1.96877	0.12047	0.02293	12.16754	1.21445	0.23645	0.0961
648505.45	4186951.83	648505.45_4186951.83	0.1918	1.63746	0.12031	0.02304	10.94633	1.19604	0.23561	0.09563
648525.45	4186951.83	648525.45_4186951.83	0.19404	1.39699	0.12026	0.02314	9.7066	1.17493	0.2348	0.09523
648545.45	4186951.83	648545.45_4186951.83	0.19638	1.21775	0.12019	0.0232	8.58235	1.15373	0.23411	0.09484
648565.45	4186951.83	648565.45_4186951.83	0.19878	1.07944	0.12008	0.02323	7.62198	1.13247	0.23349	0.09443
648585.45	4186951.83	648585.45_4186951.83	0.20129	0.97057	0.1199	0.02322	6.82808	1.11232	0.23295	0.09403
648605.45	4186951.83	648605.45_4186951.83	0.20388	0.88332	0.11962	0.02316	6.18197	1.09438	0.23247	0.09363
648625.45	4186951.83	648625.45_4186951.83	0.20639	0.81059	0.11933	0.02306	5.63693	1.07648	0.23191	0.09322
648645.45	4186951.83	648645.45_4186951.83	0.20883	0.74968	0.11898	0.02292	5.17855	1.05943	0.23129	0.09281
648665.45	4186951.83	648665.45_4186951.83	0.21117	0.69812	0.11858	0.02274	4.79035	1.04309	0.23057	0.09238
648685.45	4186951.83	648685.45_4186951.83	0.21342	0.65385	0.11821	0.02253	4.45105	1.02589	0.22972	0.09199
648705.45	4186951.83	648705.45_4186951.83	0.21552	0.6154	0.11775	0.02228	4.15937	1.00875	0.2287	0.09157
648725.45	4186951.83	648725.45_4186951.83	0.2176	0.58181	0.11721	0.022	3.90898	0.99196	0.22758	0.09113
648745.45	4186951.83	648745.45_4186951.83	0.21973	0.55207	0.1166	0.02168	3.69199	0.97557	0.22636	0.09068
648765.45	4186951.83	648765.45_4186951.83	0.2219	0.52543	0.11585	0.02135	3.50481	0.96045	0.225	0.09021
648785.45	4186951.83	648785.45_4186951.83	0.22414	0.50096	0.11526	0.02101	3.32474	0.94358	0.22331	0.0898
648805.45	4186951.83	648805.45_4186951.83	0.22655	0.47891	0.11453	0.02067	3.17081	0.9298	0.22152	0.08937
648825.45	4186951.83	648825.45_4186951.83	0.22915	0.4589	0.11371	0.02034	3.03564	0.91852	0.2196	0.08895
648845.45	4186951.83	648845.45_4186951.83	0.2318	0.44047	0.1129	0.02002	2.91134	0.90829	0.2175	0.08856
648465.45	4186971.83	648465.45_4186971.83	0.1918	2.22851	0.11876	0.02265	19.93615	1.15458	0.23192	0.09523
648485.45	4186971.83	648485.45_4186971.83	0.19406	1.79102	0.11869	0.02279	16.89653	1.13611	0.23092	0.0948
648505.45	4186971.83	648505.45_4186971.83	0.19634	1.49799	0.11856	0.0229	14.08785	1.11841	0.23012	0.09436
648525.45	4186971.83	648525.45_4186971.83	0.19867	1.28403	0.11855	0.02299	11.76771	1.09809	0.22934	0.09398
648545.45	4186971.83	648545.45_4186971.83	0.20108	1.12499	0.11847	0.02304	9.98542	1.07841	0.22869	0.09358
648565.45	4186971.83	648565.45_4186971.83	0.20363	1.00267	0.11834	0.02305	8.63128	1.05956	0.22816	0.09319
648585.45	4186971.83	648585.45_4186971.83	0.20629	0.90566	0.11816	0.02303	7.58626	1.04155	0.22767	0.0928
648605.45	4186971.83	648605.45_4186971.83	0.20901	0.82683	0.11794	0.02297	6.76306	1.02451	0.22718	0.09241
648625.45	4186971.83	648625.45_4186971.83	0.21171	0.76156	0.11767	0.02286	6.10154	1.00848	0.22667	0.09202
648645.45	4186971.83	648645.45_4186971.83	0.21433	0.70666	0.11736	0.02272	5.5589	0.99316	0.22609	0.09163
648665.45	4186971.83	648665.45_4186971.83	0.21687	0.66043	0.11692	0.02253	5.11822	0.97958	0.22548	0.0912
648685.45	4186971.83	648685.45_4186971.83	0.21924	0.62003	0.11656	0.02231	4.72783	0.96376	0.22463	0.0908
648705.45	4186971.83	648705.45_4186971.83	0.22152	0.58538	0.11609	0.02205	4.4047	0.94902	0.22372	0.09037
648725.45	4186971.83	648725.45_4186971.83	0.22374	0.55498	0.11556	0.02176	4.12609	0.934	0.22266	0.08994
648745.45	4186971.83	648745.45_4186971.83	0.22602	0.52811	0.11497	0.02145	3.88741	0.9194	0.22152	0.08951
648765.45	4186971.83	648765.45_4186971.83	0.22833	0.50396	0.11423	0.02111	3.68301	0.90593	0.22021	0.08903
648785.45	4186971.83	648785.45_4186971.83	0.23074	0.48175	0.11366	0.02078	3.48664	0.89072	0.21859	0.08863
648805.45	4186971.83	648805.45_4186971.83	0.23328	0.46156	0.11296	0.02045	3.31841	0.87805	0.21685	0.08821
648825.45	4186971.83	648825.45_4186971.83	0.23601	0.44308	0.1122	0.02012	3.16945	0.86723	0.21497	0.08781
648845.45	4186971.83	648845.45_4186971.83	0.23882	0.42601	0.11144	0.01981	3.03411	0.85764	0.21292	0.08744
648465.45	4186991.83	648465.45_4186991.83	0.19623	1.95396	0.11703	0.02252	30.28253	1.08266	0.22651	0.09395
648485.45	4186991.83	648485.45_4186991.83	0.19866	1.59343	0.11697	0.02265	22.78413	1.06548	0.22558	0.09353
648505.45	4186991.83	648505.45_4186991.83	0.20108	1.34717	0.11684	0.02275	17.43262	1.04901	0.22487	0.0931
648525.45	4186991.83	648525.45_4186991.83	0.20352	1.16564	0.11683	0.02283	13.76129	1.02985	0.22413	0.09273
648545.45	4186991.83	648545.45_4186991.83	0.20606	1.02988	0.11675	0.02287	11.2982	1.0117	0.22354	0.09234
648565.45	4186991.83	648565.45_4186991.83	0.20874	0.92432	0.11663	0.02288	9.56201	0.99438	0.22304	0.09197
648585.45	4186991.83	648585.45_4186991.83	0.21153	0.83956	0.11647	0.02284	8.27966	0.97772	0.22259	0.09159
648605.45	4186991.83	648605.45_4186991.83	0.21443	0.77041	0.11625	0.02277	7.30844	0.9625	0.22214	0.09122
648625.45	4186991.83	648625.45_4186991.83	0.21731	0.71261	0.11599	0.02266	6.54371	0.94812	0.22168	0.09083
648645.45	4186991.83	648645.45_4186991.83	0.22013	0.66371	0.11569	0.02251	5.92801	0.93451	0.22114	0.09044
648665.45	4186991.83	648665.45_4186991.83	0.22286	0.62224	0.11526	0.02231	5.43351	0.92234	0.22057	0.09002
648685.45	4186991.83	648685.45_4186991.83	0.22537	0.58574	0.11493	0.02209	4.99614	0.90775	0.21975	0.08962
648705.45	4186991.83	648705.45_4186991.83	0.22781	0.5545	0.11447	0.02183	4.64015	0.89445	0.21889	0.0892
648725.45	4186991.83	648725.45_4186991.83	0.23022	0.52716	0.11396	0.02153	4.33704	0.88102	0.2179	0.08877
648745.45	4186991.83	648745.45_4186991.83	0.23269	0.50308	0.11338	0.02122	4.07963	0.86812	0.21682	0.08835
648765.45	4186991.83	648765.45_4186991.83	0.23516	0.48139	0.11267	0.02089	3.85807	0.8559	0.21559	0.08789
648785.45	4186991.83	648785.45_4186991.83	0.23776	0.46154	0.11206	0.02055	3.65233	0.84298	0.21407	0.08748
648805.45	4186991.83	648805.45_4186991.83	0.24044	0.44323	0.11142	0.02022	3.46719	0.83083	0.21237	0.08708
648825.45	4186991.83	648825.45_4186991.83	0.24334	0.42648	0.11069	0.0199	3.30722	0.82091	0.21055	0.08669

648845.45	4186991.83	648845.45_4186991.83	0.24637	0.41094	0.10994	0.0196	3.16308	0.81225	0.20857	0.08632
648865.45	4186991.83	648865.45_4186991.83	0.24955	0.39652	0.10916	0.01933	3.03388	0.80486	0.20642	0.08599
648465.45	4187011.83	648465.45_4187011.83	0.20092	1.67818	0.11531	0.02238	43.34814	1.01893	0.22138	0.09269
648485.45	4187011.83	648485.45_4187011.83	0.2035	1.39699	0.11523	0.0225	28.16186	1.00276	0.22051	0.09228
648505.45	4187011.83	648505.45_4187011.83	0.20604	1.19611	0.11514	0.0226	20.12266	0.9864	0.2198	0.09187
648525.45	4187011.83	648525.45_4187011.83	0.20865	1.04836	0.11511	0.02267	15.3923	0.96919	0.21917	0.09151
648545.45	4187011.83	648545.45_4187011.83	0.21135	0.93584	0.11505	0.0227	12.39979	0.95238	0.21862	0.09114
648565.45	4187011.83	648565.45_4187011.83	0.21418	0.84699	0.11494	0.0227	10.36409	0.93629	0.21816	0.09078
648585.45	4187011.83	648585.45_4187011.83	0.21713	0.77478	0.11478	0.02266	8.90018	0.9211	0.21774	0.09041
648605.45	4187011.83	648605.45_4187011.83	0.22018	0.71496	0.11457	0.02258	7.80552	0.90713	0.21733	0.09004
648625.45	4187011.83	648625.45_4187011.83	0.22324	0.6644	0.11432	0.02246	6.95334	0.89398	0.21689	0.08966
648645.45	4187011.83	648645.45_4187011.83	0.22627	0.62125	0.11403	0.0223	6.27512	0.88166	0.21639	0.08928
648665.45	4187011.83	648665.45_4187011.83	0.22918	0.58423	0.11364	0.0221	5.73088	0.87034	0.21585	0.08886
648685.45	4187011.83	648685.45_4187011.83	0.23195	0.55176	0.11332	0.02187	5.2599	0.85749	0.21511	0.08848
648705.45	4187011.83	648705.45_4187011.83	0.23458	0.52369	0.11287	0.0216	4.87396	0.84535	0.21429	0.08806
648725.45	4187011.83	648725.45_4187011.83	0.23718	0.49915	0.11237	0.02131	4.5486	0.83329	0.21336	0.08764
648745.45	4187011.83	648745.45_4187011.83	0.23979	0.4775	0.11181	0.02099	4.27135	0.82149	0.21231	0.08721
648765.45	4187011.83	648765.45_4187011.83	0.24242	0.45804	0.11115	0.02066	4.03087	0.81002	0.21112	0.08677
648785.45	4187011.83	648785.45_4187011.83	0.24517	0.44032	0.11051	0.02033	3.81548	0.79876	0.20969	0.08635
648805.45	4187011.83	648805.45_4187011.83	0.2481	0.42408	0.10986	0.02	3.62198	0.78817	0.2081	0.08596
648825.45	4187011.83	648825.45_4187011.83	0.2512	0.40906	0.10918	0.01969	3.44904	0.77877	0.20632	0.08558
648845.45	4187011.83	648845.45_4187011.83	0.25445	0.39511	0.10845	0.01939	3.29629	0.7709	0.2044	0.08522
648865.45	4187011.83	648865.45_4187011.83	0.25786	0.38209	0.10768	0.01913	3.15911	0.76415	0.2023	0.08489
648465.45	4187031.83	648465.45_4187031.83	0.20573	1.4141	0.11366	0.02225	45.3216	0.96013	0.21638	0.09147
648485.45	4187031.83	648485.45_4187031.83	0.20851	1.20824	0.11361	0.02237	29.72197	0.94458	0.21556	0.09108
648505.45	4187031.83	648505.45_4187031.83	0.21125	1.05327	0.11354	0.02245	21.30499	0.92909	0.21489	0.0907
648525.45	4187031.83	648525.45_4187031.83	0.21401	0.93506	0.11349	0.02251	16.31039	0.91332	0.21432	0.09033
648545.45	4187031.83	648545.45_4187031.83	0.21685	0.84388	0.1134	0.02253	13.13524	0.89803	0.21385	0.08997
648565.45	4187031.83	648565.45_4187031.83	0.21984	0.77097	0.1133	0.02252	10.95374	0.88313	0.21342	0.08961
648585.45	4187031.83	648585.45_4187031.83	0.22296	0.71101	0.11314	0.02247	9.3916	0.86932	0.21305	0.08925
648605.45	4187031.83	648605.45_4187031.83	0.22619	0.6605	0.11292	0.02238	8.22319	0.85664	0.21268	0.08888
648625.45	4187031.83	648625.45_4187031.83	0.22947	0.61719	0.11268	0.02225	7.31337	0.8447	0.21228	0.08851
648645.45	4187031.83	648645.45_4187031.83	0.23272	0.5797	0.11241	0.02209	6.58756	0.83337	0.21181	0.08813
648665.45	4187031.83	648665.45_4187031.83	0.23589	0.54703	0.1121	0.02188	5.99726	0.8224	0.21126	0.08775
648685.45	4187031.83	648685.45_4187031.83	0.23891	0.51847	0.11172	0.02165	5.51043	0.8116	0.21062	0.08735
648705.45	4187031.83	648705.45_4187031.83	0.24178	0.49344	0.11128	0.02138	5.10264	0.80071	0.20987	0.08694
648725.45	4187031.83	648725.45_4187031.83	0.24456	0.47143	0.1108	0.02108	4.75684	0.78971	0.20899	0.08652
648745.45	4187031.83	648745.45_4187031.83	0.24732	0.45193	0.11026	0.02076	4.45913	0.77863	0.20796	0.0861
648765.45	4187031.83	648765.45_4187031.83	0.25013	0.43443	0.10971	0.02044	4.19605	0.76739	0.20675	0.08569
648785.45	4187031.83	648785.45_4187031.83	0.25308	0.41867	0.1091	0.02011	3.96809	0.75704	0.20538	0.08528
648805.45	4187031.83	648805.45_4187031.83	0.25623	0.40433	0.10839	0.01978	3.7719	0.74819	0.20391	0.08486
648825.45	4187031.83	648825.45_4187031.83	0.25952	0.391	0.10765	0.01947	3.59457	0.74012	0.20223	0.08447
648845.45	4187031.83	648845.45_4187031.83	0.26302	0.37861	0.10694	0.01918	3.4334	0.73294	0.20037	0.08412
648865.45	4187031.83	648865.45_4187031.83	0.26673	0.36703	0.10623	0.01893	3.28628	0.7265	0.19835	0.08382
648885.45	4187031.83	648885.45_4187031.83	0.27058	0.35612	0.1055	0.01872	3.15244	0.72069	0.19615	0.08356
648465.45	4187051.83	648465.45_4187051.83	0.21072	1.17965	0.11206	0.02212	45.10744	0.90663	0.21158	0.09028
648485.45	4187051.83	648485.45_4187051.83	0.2137	1.03657	0.11203	0.02223	29.37611	0.89157	0.21077	0.0899
648505.45	4187051.83	648505.45_4187051.83	0.21666	0.92261	0.11197	0.0223	21.3722	0.87691	0.21015	0.08953
648525.45	4187051.83	648525.45_4187051.83	0.2196	0.83054	0.11192	0.02235	16.58664	0.86216	0.20963	0.08917
648545.45	4187051.83	648545.45_4187051.83	0.2226	0.75716	0.11185	0.02237	13.46036	0.84767	0.20917	0.08882
648565.45	4187051.83	648565.45_4187051.83	0.22574	0.6982	0.11175	0.02235	11.2931	0.83393	0.20879	0.08847
648585.45	4187051.83	648585.45_4187051.83	0.22906	0.64937	0.1116	0.02229	9.71725	0.82123	0.20846	0.08813
648605.45	4187051.83	648605.45_4187051.83	0.23251	0.60769	0.1114	0.02219	8.52393	0.80952	0.20811	0.08777
648625.45	4187051.83	648625.45_4187051.83	0.23602	0.5714	0.11118	0.02206	7.58916	0.79857	0.20774	0.0874
648645.45	4187051.83	648645.45_4187051.83	0.23951	0.53948	0.11091	0.02188	6.84041	0.78823	0.20731	0.08703
648665.45	4187051.83	648665.45_4187051.83	0.2429	0.51124	0.1106	0.02167	6.22948	0.77819	0.2068	0.08664
648685.45	4187051.83	648685.45_4187051.83	0.24614	0.48618	0.11023	0.02143	5.72221	0.7682	0.2062	0.08625
648705.45	4187051.83	648705.45_4187051.83	0.24924	0.464	0.10981	0.02116	5.29802	0.75821	0.20547	0.08584
648725.45	4187051.83	648725.45_4187051.83	0.25224	0.44436	0.10935	0.02086	4.93793	0.74816	0.20465	0.08543
648745.45	4187051.83	648745.45_4187051.83	0.25523	0.42692	0.10883	0.02054	4.62807	0.73807	0.20367	0.08501
648765.45	4187051.83	648765.45_4187051.83	0.25828	0.41136	0.10827	0.02022	4.35912	0.72826	0.20254	0.08461
648785.45	4187051.83	648785.45_4187051.83	0.26152	0.39738	0.10766	0.01989	4.12494	0.71917	0.20127	0.0842
648805.45	4187051.83	648805.45_4187051.83	0.26492	0.38461	0.107	0.01957	3.91636	0.71077	0.19982	0.08381
648825.45	4187051.83	648825.45_4187051.83	0.2685	0.37282	0.10633	0.01927	3.72799	0.70311	0.19818	0.08344
648845.45	4187051.83	648845.45_4187051.83	0.2723	0.36189	0.10563	0.01899	3.56	0.69657	0.19635	0.08311
648865.45	4187051.83	648865.45_4187051.83	0.27629	0.35164	0.10492	0.01875	3.40778	0.69083	0.19443	0.0828
648885.45	4187051.83	648885.45_4187051.83	0.28045	0.34199	0.10417	0.01854	3.27048	0.68584	0.19231	0.08254
648465.45	4187071.83	648465.45_4187071.83	0.21593	0.98069	0.11047	0.02198	45.2127	0.85821	0.20698	0.0891
648485.45	4187071.83	648485.45_4187071.83	0.2192	0.88673	0.11042	0.02208	29.72311	0.84447	0.20626	0.08873
648505.45	4187071.83	648505.45_4187071.83	0.22238	0.80687	0.11038	0.02215	21.54763	0.83041	0.20565	0.08839
648525.45	4187071.83	648525.45_4187071.83	0.22554	0.73795	0.11033	0.02219	16.79519	0.8166	0.20518	0.08804
648545.45	4187071.83	648545.45_4187071.83	0.22876	0.68001	0.11025	0.0222	13.73421	0.80333	0.20477	0.0877
648565.45	4187071.83	648565.45_4187071.83	0.2321	0.63231	0.11015	0.02217	11.58627	0.79062	0.20443	0.08736
648585.45	4187071.83	648585.45_4187071.83	0.2356	0.59268	0.11	0.0221	10.01687	0.77894	0.20414	0.08701
648605.45	4187071.83	648605.45_4187071.83	0.23926	0.55862	0.10982	0.022	8.81079	0.768	0.20381	0.08666
648625.45	4187071.83	648625.45_4187071.83	0.24303	0.52856	0.10962	0.02186	7.8516	0.75759	0.20345	0.08631
648645.45	4187071.83	648645.45_4187071.83	0.2468	0.50179	0.10937	0.02168	7.08709	0.74797	0.20305	0.08594
648665.45	4187071.83	648665.45_4187071.83	0.25049	0.47779	0.10907	0.02146	6.46388	0.73883	0.20259	0.08556
648685.45	4187071.83	648685.45_4187071.83	0.25404	0.45615	0.10871	0.02121	5.94431	0.72973	0.20204	0.08517
648705.45	4187071.83	648705.45_4187071.83	0.25742	0.43668	0.10831	0.02094	5.50648	0.72059	0.20135	0.08477
648725.45	4187071.83	648725.45_4187071.83	0.26068	0.41919	0.10785	0.02064	5.1327	0.7113	0.20058	0.08436
648745.45	4187071.83	648745.45_4187071.83	0.26388	0.40351	0.10736	0.02032	4.80917	0.70192	0.19964	0.08395
648765.45	4187071.83	648765.45_4187071.83	0.26715	0.38948	0.10681	0.02	4.52888	0.69287	0.19854	0.08355
648785.45	4187071.83	648785.45_4187071.83	0.27056	0.37684	0.10624	0.01968	4.28088	0.68418	0.19729	0.08315
648805.45	4187071.83	648805.45_4187071.83	0.27423	0.36542	0.10561	0.01936	4.06346	0.6764	0.19588	0.08277
648825.45	4187071.83	648825.45_4187071.83	0.27811	0.35494	0.10496	0.01907	3.86818	0.66942	0.1943	0.08241

648845.45	4187071.83	648845.45_4187071.83	0.28224	0.34526	0.10427	0.0188	3.69368	0.66343	0.19254	0.08208
648865.45	4187071.83	648865.45_4187071.83	0.28658	0.33621	0.10357	0.01856	3.53592	0.65824	0.19065	0.08179
648885.45	4187071.83	648885.45_4187071.83	0.2911	0.32769	0.10285	0.01836	3.39248	0.65369	0.18865	0.08153
648485.45	4187091.83	648485.45_4187091.83	0.22487	0.75617	0.10889	0.02194	29.87554	0.80062	0.20184	0.08761
648505.45	4187091.83	648505.45_4187091.83	0.22834	0.70335	0.10885	0.022	21.75913	0.78741	0.20128	0.08727
648525.45	4187091.83	648525.45_4187091.83	0.23176	0.65469	0.1088	0.02203	17.00699	0.77459	0.20086	0.08693
648545.45	4187091.83	648545.45_4187091.83	0.2352	0.61049	0.10872	0.02203	13.93283	0.76217	0.20049	0.0866
648565.45	4187091.83	648565.45_4187091.83	0.23876	0.57223	0.10863	0.02199	11.79413	0.75035	0.20017	0.08627
648585.45	4187091.83	648585.45_4187091.83	0.24248	0.53999	0.1085	0.02192	10.22876	0.73939	0.19989	0.08593
648605.45	4187091.83	648605.45_4187091.83	0.24638	0.51239	0.10833	0.02181	9.02697	0.7292	0.1996	0.08559
648625.45	4187091.83	648625.45_4187091.83	0.25041	0.48798	0.10812	0.02166	8.07559	0.7197	0.19929	0.08524
648645.45	4187091.83	648645.45_4187091.83	0.25449	0.46592	0.10788	0.02147	7.30511	0.71074	0.19892	0.08488
648665.45	4187091.83	648665.45_4187091.83	0.25848	0.4458	0.1076	0.02125	6.67069	0.70209	0.19847	0.0845
648685.45	4187091.83	648685.45_4187091.83	0.26235	0.42744	0.10725	0.021	6.14488	0.69372	0.19796	0.08411
648705.45	4187091.83	648705.45_4187091.83	0.26604	0.41061	0.10686	0.02072	5.69879	0.68528	0.19733	0.08372
648725.45	4187091.83	648725.45_4187091.83	0.26958	0.39524	0.10642	0.02042	5.31547	0.67672	0.1966	0.08332
648745.45	4187091.83	648745.45_4187091.83	0.27307	0.38128	0.10593	0.02011	4.98383	0.66815	0.19571	0.08291
648765.45	4187091.83	648765.45_4187091.83	0.2766	0.36866	0.1054	0.01979	4.69419	0.65978	0.19465	0.08251
648785.45	4187091.83	648785.45_4187091.83	0.28032	0.35727	0.10484	0.01947	4.43953	0.65189	0.19346	0.08212
648805.45	4187091.83	648805.45_4187091.83	0.28427	0.34698	0.10423	0.01916	4.21389	0.64469	0.19209	0.08174
648825.45	4187091.83	648825.45_4187091.83	0.28851	0.33759	0.10359	0.01887	4.01228	0.63831	0.19056	0.08139
648845.45	4187091.83	648845.45_4187091.83	0.293	0.32896	0.10293	0.01861	3.83085	0.63275	0.18887	0.08107
648865.45	4187091.83	648865.45_4187091.83	0.29773	0.32093	0.10225	0.01838	3.66746	0.62803	0.18701	0.08078
648885.45	4187091.83	648885.45_4187091.83	0.30261	0.3134	0.10155	0.01819	3.51709	0.62376	0.18505	0.08054
648485.45	4187111.83	648485.45_4187111.83	0.23079	0.64564	0.1074	0.0218	30.29732	0.76031	0.19759	0.08651
648505.45	4187111.83	648505.45_4187111.83	0.23458	0.61245	0.10736	0.02185	22.11872	0.74796	0.19706	0.08618
648525.45	4187111.83	648525.45_4187111.83	0.23829	0.58	0.10732	0.02188	17.27949	0.73581	0.19666	0.08585
648545.45	4187111.83	648545.45_4187111.83	0.242	0.54812	0.10725	0.02186	14.17274	0.72423	0.19632	0.08553
648565.45	4187111.83	648565.45_4187111.83	0.24581	0.51828	0.10717	0.02182	12.01589	0.71323	0.19603	0.08521
648585.45	4187111.83	648585.45_4187111.83	0.24978	0.49205	0.10705	0.02174	10.43769	0.70298	0.19579	0.08488
648605.45	4187111.83	648605.45_4187111.83	0.25395	0.46955	0.10688	0.02162	9.2338	0.69351	0.19552	0.08454
648625.45	4187111.83	648625.45_4187111.83	0.25827	0.44982	0.10667	0.02146	8.28314	0.6847	0.19524	0.08419
648645.45	4187111.83	648645.45_4187111.83	0.26267	0.43194	0.10643	0.02127	7.51257	0.67641	0.19492	0.08383
648665.45	4187111.83	648665.45_4187111.83	0.26701	0.41542	0.10615	0.02104	6.87626	0.66842	0.19451	0.08346
648685.45	4187111.83	648685.45_4187111.83	0.27123	0.40007	0.10582	0.02079	6.34221	0.66054	0.19403	0.08307
648705.45	4187111.83	648705.45_4187111.83	0.27525	0.38576	0.10544	0.02051	5.88727	0.65261	0.19344	0.08268
648725.45	4187111.83	648725.45_4187111.83	0.27911	0.37247	0.10501	0.02021	5.49691	0.64467	0.19274	0.08229
648745.45	4187111.83	648745.45_4187111.83	0.2829	0.36019	0.10454	0.01989	5.15761	0.63674	0.19189	0.08188
648485.45	4187131.83	648485.45_4187131.83	0.23695	0.55553	0.10594	0.02166	30.95716	0.7233	0.19348	0.08543
648505.45	4187131.83	648505.45_4187131.83	0.24109	0.5352	0.10591	0.0217	22.63356	0.71171	0.193	0.08511
648525.45	4187131.83	648525.45_4187131.83	0.24515	0.51458	0.10586	0.02172	17.72555	0.70038	0.19262	0.0848
648545.45	4187131.83	648545.45_4187131.83	0.24918	0.49281	0.1058	0.0217	14.53436	0.6895	0.19231	0.08448
648565.45	4187131.83	648565.45_4187131.83	0.25327	0.47054	0.10572	0.02164	12.32534	0.67928	0.19206	0.08416
648585.45	4187131.83	648585.45_4187131.83	0.25753	0.44945	0.10561	0.02155	10.71032	0.66971	0.19184	0.08384
648605.45	4187131.83	648605.45_4187131.83	0.26199	0.43081	0.10545	0.02143	9.47868	0.66082	0.1916	0.08351
648625.45	4187131.83	648625.45_4187131.83	0.26664	0.41462	0.10525	0.02126	8.51134	0.65258	0.19134	0.08316
648645.45	4187131.83	648645.45_4187131.83	0.27139	0.40013	0.10502	0.02106	7.72823	0.64475	0.19106	0.08281
648665.45	4187131.83	648665.45_4187131.83	0.27612	0.38673	0.10474	0.02084	7.08335	0.63725	0.19068	0.08244
648685.45	4187131.83	648685.45_4187131.83	0.28072	0.37409	0.10442	0.02058	6.54088	0.62981	0.19022	0.08206
648705.45	4187131.83	648705.45_4187131.83	0.28513	0.36213	0.10406	0.02029	6.07864	0.62237	0.18968	0.08167
648725.45	4187131.83	648725.45_4187131.83	0.28936	0.35083	0.10364	0.01999	5.68065	0.61491	0.189	0.08127
648745.45	4187131.83	648745.45_4187131.83	0.29351	0.3402	0.10318	0.01968	5.33497	0.60756	0.18819	0.08088
648505.45	4187151.83	648505.45_4187151.83	0.24791	0.47182	0.10448	0.02155	23.44556	0.67836	0.18907	0.08406
648525.45	4187151.83	648525.45_4187151.83	0.25236	0.45899	0.10444	0.02156	18.33739	0.66772	0.18872	0.08376
648545.45	4187151.83	648545.45_4187151.83	0.25675	0.44476	0.10438	0.02153	15.03458	0.65758	0.18845	0.08345
648565.45	4187151.83	648565.45_4187151.83	0.26119	0.42888	0.10431	0.02147	12.72759	0.64797	0.18821	0.08314
648585.45	4187151.83	648585.45_4187151.83	0.26577	0.41238	0.10419	0.02137	11.05039	0.63904	0.18802	0.08282
648605.45	4187151.83	648605.45_4187151.83	0.27056	0.3968	0.10404	0.02124	9.77467	0.63069	0.18781	0.08249
648625.45	4187151.83	648625.45_4187151.83	0.27557	0.38306	0.10386	0.02107	8.77399	0.62288	0.18757	0.08215
648645.45	4187151.83	648645.45_4187151.83	0.28071	0.37102	0.10363	0.02086	7.96796	0.61548	0.18731	0.0818
648665.45	4187151.83	648665.45_4187151.83	0.28588	0.36009	0.10337	0.02063	7.30615	0.60834	0.18696	0.08143
648685.45	4187151.83	648685.45_4187151.83	0.29091	0.34978	0.10305	0.02037	6.75125	0.60133	0.18653	0.08106
648705.45	4187151.83	648705.45_4187151.83	0.29576	0.33989	0.1027	0.02008	6.27944	0.5943	0.18603	0.08067
648725.45	4187151.83	648725.45_4187151.83	0.30041	0.3304	0.10229	0.01978	5.87326	0.58731	0.18539	0.08028
648745.45	4187151.83	648745.45_4187151.83	0.30497	0.32132	0.10185	0.01947	5.51945	0.58041	0.18461	0.07989
648765.45	4187151.83	648765.45_4187151.83	0.30958	0.31268	0.10137	0.01916	5.20841	0.57373	0.1837	0.07951
648505.45	4187171.83	648505.45_4187171.83	0.25503	0.42011	0.10308	0.0214	24.70223	0.64755	0.18528	0.08304
648525.45	4187171.83	648525.45_4187171.83	0.25993	0.41234	0.10305	0.0214	19.19294	0.63756	0.18496	0.08274
648545.45	4187171.83	648545.45_4187171.83	0.26476	0.40344	0.103	0.02136	15.67946	0.62806	0.1847	0.08245
648565.45	4187171.83	648565.45_4187171.83	0.26959	0.39274	0.10292	0.02129	13.24624	0.61908	0.18449	0.08214
648585.45	4187171.83	648585.45_4187171.83	0.27455	0.38043	0.10282	0.02119	11.47485	0.61068	0.18432	0.08182
648605.45	4187171.83	648605.45_4187171.83	0.27972	0.36765	0.10267	0.02105	10.13605	0.60283	0.18414	0.0815
648625.45	4187171.83	648625.45_4187171.83	0.28512	0.35571	0.1025	0.02087	9.08818	0.59545	0.18392	0.08116
648645.45	4187171.83	648645.45_4187171.83	0.29071	0.34523	0.10228	0.02066	8.2489	0.58842	0.18369	0.08081
648665.45	4187171.83	648665.45_4187171.83	0.29635	0.33598	0.10202	0.02043	7.56021	0.5816	0.18337	0.08045
648685.45	4187171.83	648685.45_4187171.83	0.30189	0.32746	0.10172	0.02016	6.98565	0.57491	0.18297	0.08008
648705.45	4187171.83	648705.45_4187171.83	0.30723	0.3193	0.10138	0.01988	6.49754	0.56823	0.18249	0.0797
648725.45	4187171.83	648725.45_4187171.83	0.31237	0.31137	0.10099	0.01958	6.07872	0.56159	0.18188	0.07931
648745.45	4187171.83	648745.45_4187171.83	0.31739	0.30367	0.10055	0.01927	5.71592	0.5551	0.18114	0.07893
648765.45	4187171.83	648765.45_4187171.83	0.32249	0.29622	0.10008	0.01896	5.39681	0.54888	0.18026	0.07856
648505.45	4187191.83	648505.45_4187191.83	0.26249	0.37799	0.10172	0.02125	26.43206	0.61895	0.18159	0.08204
648525.45	4187191.83	648525.45_4187191.83	0.26788	0.37312	0.10169	0.02124	20.35056	0.60963	0.18131	0.08175
648545.45	4187191.83	648545.45_4187191.83	0.27321	0.36771	0.10164	0.0212	16.51433	0.60073	0.18108	0.08146
648565.45	4187191.83	648565.45_4187191.83	0.27852	0.36093	0.10157	0.02112	13.89748	0.59233	0.18089	0.08116
648585.45	4187191.83	648585.45_4187191.83	0.28392	0.35237	0.10147	0.02101	11.99816	0.5844	0.18074	0.08085
648605.45	4187191.83	648605.45_4187191.83	0.28952	0.34246	0.10133	0.02086	10.57107	0.57699	0.18058	0.08053

648625.45	4187191.83	648625.45_4187191.83	0.29538	0.33229	0.10116	0.02068	9.46119	0.56998	0.18039	0.0802
648645.45	4187191.83	648645.45_4187191.83	0.30146	0.32291	0.10095	0.02047	8.57663	0.56329	0.18018	0.07985
648665.45	4187191.83	648665.45_4187191.83	0.30764	0.31471	0.1007	0.02022	7.85344	0.55677	0.17989	0.07949
648685.45	4187191.83	648685.45_4187191.83	0.31374	0.30741	0.10041	0.01996	7.25245	0.55036	0.17952	0.07912
648705.45	4187191.83	648705.45_4187191.83	0.31966	0.30058	0.10008	0.01967	6.74424	0.544	0.17907	0.07874
648725.45	4187191.83	648725.45_4187191.83	0.32535	0.29395	0.0997	0.01937	6.30915	0.5377	0.17849	0.07836
648745.45	4187191.83	648745.45_4187191.83	0.33092	0.28742	0.09928	0.01906	5.93224	0.53154	0.17778	0.07798
648765.45	4187191.83	648765.45_4187191.83	0.33659	0.28101	0.09882	0.01876	5.60267	0.52567	0.17694	0.07761
648525.45	4187211.83	648525.45_4187211.83	0.27624	0.3407	0.10036	0.02108	21.87789	0.58371	0.17778	0.08078
648545.45	4187211.83	648545.45_4187211.83	0.28214	0.33709	0.10031	0.02103	17.59224	0.57539	0.17758	0.08049
648565.45	4187211.83	648565.45_4187211.83	0.288	0.3328	0.10025	0.02094	14.70465	0.56748	0.1774	0.0802
648585.45	4187211.83	648585.45_4187211.83	0.29393	0.32717	0.10015	0.02083	12.641	0.56003	0.17728	0.07989
648605.45	4187211.83	648605.45_4187211.83	0.30004	0.31999	0.10002	0.02067	11.09834	0.553	0.17714	0.07958
648625.45	4187211.83	648625.45_4187211.83	0.30642	0.31181	0.09986	0.02049	9.9091	0.54634	0.17698	0.07925
648645.45	4187211.83	648645.45_4187211.83	0.31306	0.30359	0.09966	0.02027	8.96261	0.53992	0.17679	0.0789
648665.45	4187211.83	648665.45_4187211.83	0.31984	0.29612	0.09942	0.02002	8.19503	0.53367	0.17652	0.07854
648685.45	4187211.83	648685.45_4187211.83	0.32659	0.2896	0.09913	0.01976	7.56	0.5275	0.17617	0.07817
648705.45	4187211.83	648705.45_4187211.83	0.33316	0.28372	0.09881	0.01947	7.02551	0.52141	0.17575	0.0778
648725.45	4187211.83	648725.45_4187211.83	0.33951	0.27813	0.09844	0.01917	6.56879	0.51539	0.1752	0.07743
648745.45	4187211.83	648745.45_4187211.83	0.34574	0.27261	0.09804	0.01886	6.1737	0.50952	0.17452	0.07706
648765.45	4187211.83	648765.45_4187211.83	0.35208	0.26712	0.09759	0.01856	5.82954	0.50394	0.17373	0.07669
648785.45	4187211.83	648785.45_4187211.83	0.35877	0.26168	0.09711	0.01827	5.52618	0.49876	0.17277	0.07634
648525.45	4187231.83	648525.45_4187231.83	0.28504	0.31431	0.09905	0.02092	23.92956	0.55965	0.17436	0.07983
648545.45	4187231.83	648545.45_4187231.83	0.29156	0.31148	0.09901	0.02086	18.98604	0.55185	0.17419	0.07955
648565.45	4187231.83	648565.45_4187231.83	0.29808	0.30844	0.09895	0.02077	15.71468	0.54438	0.17403	0.07926
648585.45	4187231.83	648585.45_4187231.83	0.30464	0.30466	0.09886	0.02064	13.42396	0.53734	0.17393	0.07895
648605.45	4187231.83	648605.45_4187231.83	0.31135	0.29964	0.09874	0.02049	11.73285	0.53066	0.17381	0.07864
648625.45	4187231.83	648625.45_4187231.83	0.31834	0.29339	0.09858	0.02029	10.44268	0.52431	0.17366	0.07831
648645.45	4187231.83	648645.45_4187231.83	0.32561	0.2865	0.09839	0.02007	9.42359	0.51818	0.1735	0.07797
648665.45	4187231.83	648665.45_4187231.83	0.33308	0.27977	0.09815	0.01983	8.59842	0.51216	0.17326	0.07762
648685.45	4187231.83	648685.45_4187231.83	0.34057	0.27377	0.09788	0.01955	7.91882	0.50621	0.17293	0.07725
648705.45	4187231.83	648705.45_4187231.83	0.34791	0.26851	0.09757	0.01927	7.34934	0.50033	0.17253	0.07688
648725.45	4187231.83	648725.45_4187231.83	0.35503	0.26371	0.09721	0.01897	6.86595	0.49456	0.17201	0.07651
648745.45	4187231.83	648745.45_4187231.83	0.36203	0.25907	0.09682	0.01867	6.44931	0.48896	0.17136	0.07614
648765.45	4187231.83	648765.45_4187231.83	0.36918	0.2544	0.09639	0.01837	6.08653	0.48364	0.17061	0.07578
648785.45	4187231.83	648785.45_4187231.83	0.37673	0.24971	0.09592	0.01808	5.7689	0.47873	0.16968	0.07544
648805.45	4187231.83	648805.45_4187231.83	0.38487	0.24503	0.09542	0.01782	5.48675	0.47431	0.16861	0.07511
648945.45	4187231.83	648945.45_4187231.83	0.45047	0.21794	0.09124	0.01688	4.13375	0.45794	0.15745	0.0739
648525.45	4187251.83	648525.45_4187251.83	0.29433	0.2925	0.09778	0.02076	26.62071	0.53718	0.17105	0.0789
648545.45	4187251.83	648545.45_4187251.83	0.30154	0.29019	0.09774	0.0207	20.75778	0.52987	0.1709	0.07862
648565.45	4187251.83	648565.45_4187251.83	0.3088	0.28778	0.09768	0.0206	16.98246	0.52286	0.17077	0.07833
648585.45	4187251.83	648585.45_4187251.83	0.3161	0.285	0.0976	0.02046	14.38637	0.51618	0.17068	0.07803
648605.45	4187251.83	648605.45_4187251.83	0.32354	0.28141	0.09748	0.0203	12.50617	0.50984	0.17058	0.07772
648625.45	4187251.83	648625.45_4187251.83	0.33123	0.27675	0.09733	0.0201	11.08347	0.50376	0.17045	0.07739
648645.45	4187251.83	648645.45_4187251.83	0.33924	0.27117	0.09714	0.01988	9.97181	0.49788	0.17031	0.07705
648665.45	4187251.83	648665.45_4187251.83	0.34751	0.26526	0.09692	0.01963	9.07426	0.49207	0.17009	0.07671
648685.45	4187251.83	648685.45_4187251.83	0.35585	0.25968	0.09665	0.01936	8.33842	0.48632	0.16978	0.07634
648705.45	4187251.83	648705.45_4187251.83	0.36408	0.25478	0.09636	0.01907	7.72667	0.48065	0.16941	0.07598
648725.45	4187251.83	648725.45_4187251.83	0.37212	0.2505	0.09601	0.01877	7.20875	0.47508	0.16892	0.07561
648745.45	4187251.83	648745.45_4187251.83	0.38006	0.24653	0.09563	0.01847	6.76461	0.4697	0.1683	0.07525
648765.45	4187251.83	648765.45_4187251.83	0.38818	0.24262	0.09521	0.01818	6.37956	0.46461	0.16757	0.07489
648785.45	4187251.83	648785.45_4187251.83	0.39677	0.23864	0.09475	0.0179	6.0428	0.45991	0.16667	0.07456
648805.45	4187251.83	648805.45_4187251.83	0.40603	0.23459	0.09426	0.01764	5.74575	0.45572	0.16564	0.07424
648825.45	4187251.83	648825.45_4187251.83	0.41593	0.23053	0.09374	0.0174	5.48033	0.45206	0.16448	0.07395
648845.45	4187251.83	648845.45_4187251.83	0.4263	0.22655	0.09319	0.0172	5.24204	0.44899	0.16313	0.0737
648865.45	4187251.83	648865.45_4187251.83	0.43694	0.22271	0.09263	0.01704	5.02681	0.44648	0.1617	0.07348
648885.45	4187251.83	648885.45_4187251.83	0.44767	0.21908	0.09204	0.01691	4.83009	0.44448	0.16011	0.0733
648905.45	4187251.83	648905.45_4187251.83	0.45833	0.21568	0.09143	0.01682	4.64939	0.4429	0.1584	0.07318
648925.45	4187251.83	648925.45_4187251.83	0.46878	0.21254	0.0908	0.01677	4.48179	0.44162	0.15666	0.0731
648945.45	4187251.83	648945.45_4187251.83	0.47877	0.20962	0.09017	0.01675	4.32557	0.44054	0.1548	0.07307
648545.45	4187271.83	648545.45_4187271.83	0.31212	0.27208	0.0965	0.02053	23.05621	0.50934	0.16771	0.07771
648565.45	4187271.83	648565.45_4187271.83	0.32021	0.27017	0.09644	0.02042	18.5868	0.50274	0.1676	0.07742
648585.45	4187271.83	648585.45_4187271.83	0.32838	0.268	0.09636	0.02029	15.59403	0.49642	0.16753	0.07712
648605.45	4187271.83	648605.45_4187271.83	0.33668	0.26532	0.09626	0.02012	13.45898	0.49038	0.16745	0.07682
648625.45	4187271.83	648625.45_4187271.83	0.34523	0.26182	0.09611	0.01992	11.86406	0.48455	0.16734	0.07649
648645.45	4187271.83	648645.45_4187271.83	0.35411	0.2574	0.09593	0.01969	10.62862	0.47889	0.16722	0.07616
648665.45	4187271.83	648665.45_4187271.83	0.36329	0.25235	0.0957	0.01943	9.64258	0.4733	0.16701	0.07581
648685.45	4187271.83	648685.45_4187271.83	0.37263	0.24722	0.09545	0.01916	8.83805	0.46776	0.16674	0.07545
648705.45	4187271.83	648705.45_4187271.83	0.38192	0.24252	0.09516	0.01887	8.16931	0.46224	0.16638	0.07509
648725.45	4187271.83	648725.45_4187271.83	0.39106	0.23846	0.09483	0.01858	7.60805	0.45686	0.16591	0.07473
648745.45	4187271.83	648745.45_4187271.83	0.40013	0.2349	0.09446	0.01828	7.13009	0.45168	0.16532	0.07437
648765.45	4187271.83	648765.45_4187271.83	0.40944	0.23157	0.09405	0.01799	6.71748	0.44678	0.16462	0.07402
648785.45	4187271.83	648785.45_4187271.83	0.4193	0.22823	0.09361	0.01772	6.35763	0.44227	0.16376	0.07369
648805.45	4187271.83	648805.45_4187271.83	0.4299	0.2248	0.09313	0.01746	6.04108	0.43824	0.16276	0.07338
648825.45	4187271.83	648825.45_4187271.83	0.44119	0.2213	0.09262	0.01724	5.75907	0.43475	0.16163	0.0731
648845.45	4187271.83	648845.45_4187271.83	0.45293	0.21777	0.09208	0.01704	5.50637	0.43183	0.16033	0.07285
648865.45	4187271.83	648865.45_4187271.83	0.46488	0.21431	0.09153	0.01689	5.27887	0.42946	0.15892	0.07264
648885.45	4187271.83	648885.45_4187271.83	0.47684	0.21096	0.09096	0.01677	5.07079	0.42758	0.15739	0.07248
648905.45	4187271.83	648905.45_4187271.83	0.48864	0.20779	0.09036	0.01668	4.88003	0.42613	0.15571	0.07235
648925.45	4187271.83	648925.45_4187271.83	0.50004	0.20482	0.08974	0.01663	4.70315	0.42499	0.15401	0.07229
648945.45	4187271.83	648945.45_4187271.83	0.51074	0.20205	0.08913	0.01662	4.53771	0.42407	0.15222	0.07227
648965.45	4187271.83	648965.45_4187271.83	0.52045	0.19946	0.0885	0.01663	4.38316	0.42326	0.15036	0.0723
648545.45	4187291.83	648545.45_4187291.83	0.32337	0.2563	0.09529	0.02036	26.08668	0.49012	0.16462	0.07681
648565.45	4187291.83	648565.45_4187291.83	0.33238	0.25482	0.09523	0.02025	20.69084	0.4839	0.16454	0.07653
648585.45	4187291.83	648585.45_4187291.83	0.34156	0.25313	0.09515	0.02011	17.14127	0.47793	0.16448	0.07624
648605.45	4187291.83	648605.45_4187291.83	0.3509	0.2511	0.09505	0.01993	14.65256	0.47215	0.16441	0.07593

648625.45	4187291.83	648625.45_4187291.83	0.36046	0.24848	0.09491	0.01973	12.83239	0.46659	0.16433	0.07561
648645.45	4187291.83	648645.45_4187291.83	0.37037	0.24505	0.09473	0.0195	11.43417	0.46114	0.16422	0.07527
648665.45	4187291.83	648665.45_4187291.83	0.38065	0.24086	0.09452	0.01924	10.32606	0.45572	0.16403	0.07493
648685.45	4187291.83	648685.45_4187291.83	0.39116	0.23625	0.09427	0.01897	9.43265	0.45036	0.16378	0.07457
648705.45	4187291.83	648705.45_4187291.83	0.40171	0.23173	0.09399	0.01868	8.69578	0.44503	0.16344	0.07422
648725.45	4187291.83	648725.45_4187291.83	0.41217	0.2277	0.09367	0.01839	8.0801	0.43982	0.163	0.07386
648745.45	4187291.83	648745.45_4187291.83	0.42264	0.22427	0.0933	0.01809	7.55958	0.4348	0.16244	0.0735
648765.45	4187291.83	648765.45_4187291.83	0.43342	0.22126	0.09291	0.01781	7.11165	0.43006	0.16175	0.07316
648785.45	4187291.83	648785.45_4187291.83	0.44485	0.2184	0.09248	0.01754	6.72315	0.4257	0.16093	0.07284
648805.45	4187291.83	648805.45_4187291.83	0.45709	0.21552	0.09202	0.01729	6.38121	0.4218	0.15997	0.07254
648825.45	4187291.83	648825.45_4187291.83	0.47002	0.21255	0.09152	0.01707	6.0791	0.41845	0.15885	0.07226
648845.45	4187291.83	648845.45_4187291.83	0.48338	0.2095	0.091	0.01689	5.80866	0.41564	0.15761	0.07202
648865.45	4187291.83	648865.45_4187291.83	0.49687	0.20643	0.09045	0.01674	5.56561	0.41339	0.15624	0.07182
648885.45	4187291.83	648885.45_4187291.83	0.51025	0.20341	0.0899	0.01662	5.34363	0.41162	0.15474	0.07166
648905.45	4187291.83	648905.45_4187291.83	0.52329	0.2005	0.08931	0.01655	5.14054	0.41029	0.15313	0.07155
648925.45	4187291.83	648925.45_4187291.83	0.53569	0.19773	0.0887	0.0165	4.95183	0.40926	0.15143	0.07149
648945.45	4187291.83	648945.45_4187291.83	0.54707	0.19512	0.0881	0.01649	4.77501	0.40845	0.14968	0.07148
648965.45	4187291.83	648965.45_4187291.83	0.55711	0.19266	0.08748	0.01651	4.61047	0.40781	0.14788	0.07152
648565.45	4187311.83	648565.45_4187311.83	0.34541	0.2412	0.09404	0.02008	23.56726	0.46624	0.16156	0.07566
648585.45	4187311.83	648585.45_4187311.83	0.35573	0.2399	0.09397	0.01993	19.17869	0.46055	0.16151	0.07537
648605.45	4187311.83	648605.45_4187311.83	0.36629	0.23836	0.09387	0.01975	16.19252	0.45506	0.16147	0.07506
648625.45	4187311.83	648625.45_4187311.83	0.3771	0.23641	0.09374	0.01954	14.0425	0.44971	0.1614	0.07474
648645.45	4187311.83	648645.45_4187311.83	0.38827	0.23383	0.09357	0.01931	12.42334	0.44446	0.1613	0.07441
648665.45	4187311.83	648665.45_4187311.83	0.39985	0.23049	0.09336	0.01905	11.15824	0.43923	0.16114	0.07407
648685.45	4187311.83	648685.45_4187311.83	0.41176	0.22653	0.09312	0.01877	10.14897	0.43404	0.16091	0.07372
648705.45	4187311.83	648705.45_4187311.83	0.42381	0.22231	0.09285	0.01849	9.32236	0.42887	0.16058	0.07336
648725.45	4187311.83	648725.45_4187311.83	0.43591	0.2183	0.09254	0.0182	8.63878	0.42381	0.16017	0.07301
648745.45	4187311.83	648745.45_4187311.83	0.44812	0.21479	0.09218	0.01791	8.06322	0.41893	0.15964	0.07266
648765.45	4187311.83	648765.45_4187311.83	0.46074	0.21183	0.0918	0.01763	7.57157	0.41433	0.15897	0.07232
648785.45	4187311.83	648785.45_4187311.83	0.47411	0.20922	0.09138	0.01736	7.14881	0.41011	0.15818	0.072
648805.45	4187311.83	648805.45_4187311.83	0.48834	0.20673	0.09093	0.01712	6.77767	0.40634	0.15726	0.07171
648825.45	4187311.83	648825.45_4187311.83	0.50325	0.20421	0.09045	0.01691	6.44996	0.40309	0.15617	0.07144
648845.45	4187311.83	648845.45_4187311.83	0.51852	0.20161	0.08994	0.01673	6.15758	0.40038	0.15495	0.07121
648865.45	4187311.83	648865.45_4187311.83	0.5338	0.19894	0.0894	0.01659	5.89521	0.39822	0.15363	0.07102
648885.45	4187311.83	648885.45_4187311.83	0.54881	0.19627	0.08886	0.01648	5.65599	0.39654	0.15217	0.07087
648905.45	4187311.83	648905.45_4187311.83	0.56321	0.19364	0.08828	0.01641	5.43684	0.39528	0.15061	0.07076
648925.45	4187311.83	648925.45_4187311.83	0.5766	0.1911	0.08769	0.01638	5.23327	0.39435	0.14895	0.07071
648945.45	4187311.83	648945.45_4187311.83	0.58854	0.18867	0.08709	0.01637	5.04278	0.39365	0.14722	0.0707
648965.45	4187311.83	648965.45_4187311.83	0.59868	0.18636	0.08649	0.01639	4.86547	0.39314	0.14548	0.07075
648985.45	4187311.83	648985.45_4187311.83	0.60672	0.18418	0.08587	0.01642	4.6984	0.3927	0.14367	0.07084
648565.45	4187331.83	648565.45_4187331.83	0.3594	0.22902	0.09288	0.01991	27.6613	0.44966	0.15867	0.07481
648585.45	4187331.83	648585.45_4187331.83	0.37099	0.22801	0.09282	0.01975	21.97824	0.44427	0.15864	0.07451
648605.45	4187331.83	648605.45_4187331.83	0.38299	0.22682	0.09272	0.01957	18.23079	0.43901	0.15862	0.07421
648625.45	4187331.83	648625.45_4187331.83	0.39533	0.22537	0.09259	0.01936	15.60055	0.43386	0.15855	0.07389
648645.45	4187331.83	648645.45_4187331.83	0.40804	0.22347	0.09243	0.01912	13.66964	0.42879	0.15848	0.07356
648665.45	4187331.83	648665.45_4187331.83	0.4212	0.22094	0.09223	0.01886	12.18954	0.42374	0.15833	0.07322
648685.45	4187331.83	648685.45_4187331.83	0.4348	0.21772	0.09199	0.01858	11.02388	0.4187	0.15812	0.07287
648705.45	4187331.83	648705.45_4187331.83	0.4487	0.21399	0.09173	0.0183	10.08323	0.4137	0.15781	0.07252
648725.45	4187331.83	648725.45_4187331.83	0.46282	0.21013	0.09142	0.01801	9.31141	0.40878	0.15742	0.07217
648745.45	4187331.83	648745.45_4187331.83	0.47723	0.20654	0.09108	0.01772	8.66703	0.40403	0.15692	0.07183
648765.45	4187331.83	648765.45_4187331.83	0.49219	0.20345	0.0907	0.01745	8.12111	0.39956	0.15627	0.0715
648785.45	4187331.83	648785.45_4187331.83	0.50799	0.20083	0.0903	0.01719	7.65294	0.39545	0.1555	0.07118
648805.45	4187331.83	648805.45_4187331.83	0.52468	0.19852	0.08986	0.01696	7.24472	0.39178	0.15461	0.07089
648825.45	4187331.83	648825.45_4187331.83	0.542	0.19632	0.08939	0.01675	6.88572	0.38861	0.15357	0.07064
648845.45	4187331.83	648845.45_4187331.83	0.55955	0.19409	0.08889	0.01658	6.56569	0.38599	0.15238	0.07041
648865.45	4187331.83	648865.45_4187331.83	0.57694	0.19179	0.08837	0.01645	6.2788	0.38389	0.15109	0.07023
648885.45	4187331.83	648885.45_4187331.83	0.59375	0.18945	0.08784	0.01635	6.01679	0.38226	0.14967	0.07009
648905.45	4187331.83	648905.45_4187331.83	0.60958	0.18711	0.08727	0.01628	5.77811	0.38109	0.14815	0.06999
648925.45	4187331.83	648925.45_4187331.83	0.62386	0.18481	0.08669	0.01625	5.55572	0.38023	0.14653	0.06994
648945.45	4187331.83	648945.45_4187331.83	0.63608	0.18258	0.08611	0.01625	5.34778	0.37962	0.14484	0.06994
648965.45	4187331.83	648965.45_4187331.83	0.64595	0.18045	0.08551	0.01627	5.15477	0.37921	0.14312	0.06999
648985.45	4187331.83	648985.45_4187331.83	0.65318	0.1784	0.0849	0.01631	4.97242	0.3789	0.14139	0.07009
648565.45	4187351.83	648565.45_4187351.83	0.37455	0.21808	0.09175	0.01974	33.5364	0.43402	0.15586	0.07396
648585.45	4187351.83	648585.45_4187351.83	0.38753	0.21727	0.09169	0.01958	25.91504	0.42891	0.15585	0.07367
648605.45	4187351.83	648605.45_4187351.83	0.40118	0.21633	0.09159	0.01939	20.9944	0.42389	0.15584	0.07337
648625.45	4187351.83	648625.45_4187351.83	0.41534	0.21522	0.09147	0.01917	17.65951	0.41896	0.15579	0.07306
648645.45	4187351.83	648645.45_4187351.83	0.42997	0.21382	0.0913	0.01893	15.27229	0.41406	0.15573	0.07273
648665.45	4187351.83	648665.45_4187351.83	0.4451	0.21197	0.09111	0.01867	13.49024	0.40917	0.15561	0.07239
648685.45	4187351.83	648685.45_4187351.83	0.46078	0.20949	0.09089	0.0184	12.11305	0.40428	0.15542	0.07204
648705.45	4187351.83	648705.45_4187351.83	0.47697	0.2064	0.09064	0.01811	11.01859	0.39941	0.15512	0.0717
648725.45	4187351.83	648725.45_4187351.83	0.49365	0.20291	0.09034	0.01783	10.13142	0.39463	0.15475	0.07135
648745.45	4187351.83	648745.45_4187351.83	0.51089	0.19939	0.09	0.01754	9.39814	0.39001	0.15427	0.07101
648765.45	4187351.83	648765.45_4187351.83	0.52886	0.19615	0.08964	0.01727	8.78287	0.38566	0.15365	0.07069
648785.45	4187351.83	648785.45_4187351.83	0.54774	0.19339	0.08924	0.01702	8.25785	0.38165	0.15291	0.07038
648805.45	4187351.83	648805.45_4187351.83	0.56748	0.19105	0.08882	0.0168	7.80224	0.37806	0.15204	0.0701
648825.45	4187351.83	648825.45_4187351.83	0.58774	0.18897	0.08836	0.0166	7.40275	0.37497	0.15103	0.06985
648845.45	4187351.83	648845.45_4187351.83	0.60804	0.18699	0.08787	0.01643	7.04768	0.3724	0.14989	0.06963
648865.45	4187351.83	648865.45_4187351.83	0.62785	0.18499	0.08736	0.01631	6.72848	0.37035	0.14861	0.06945
648885.45	4187351.83	648885.45_4187351.83	0.64665	0.18295	0.08684	0.01621	6.4383	0.36876	0.14722	0.06932
648905.45	4187351.83	648905.45_4187351.83	0.66383	0.18088	0.08628	0.01616	6.17321	0.36763	0.14575	0.06923
648925.45	4187351.83	648925.45_4187351.83	0.67872	0.17882	0.08571	0.01613	5.92781	0.36684	0.14417	0.06919
648945.45	4187351.83	648945.45_4187351.83	0.69082	0.17679	0.08514	0.01613	5.69944	0.36631	0.14254	0.0692
648965.45	4187351.83	648965.45_4187351.83	0.69981	0.17483	0.08455	0.01615	5.48561	0.36599	0.14084	0.06925
648985.45	4187351.83	648985.45_4187351.83	0.7056	0.17293	0.08395	0.01619	5.28454	0.36577	0.13913	0.06935
649005.45	4187351.83	649005.45_4187351.83	0.70831	0.17111	0.08335	0.01625	5.09443	0.36559	0.13743	0.0695
648565.45	4187371.83	648565.45_4187371.83	0.39107	0.20823	0.09064	0.01957	42.46494	0.4193	0.15314	0.07314

648585.45	4187371.83	648585.45_4187371.83	0.40556	0.20753	0.09058	0.01941	31.70693	0.41444	0.15314	0.07285
648605.45	4187371.83	648605.45_4187371.83	0.42107	0.20677	0.09049	0.01921	24.89181	0.40965	0.15315	0.07255
648625.45	4187371.83	648625.45_4187371.83	0.43737	0.20588	0.09036	0.01899	20.4687	0.40493	0.15312	0.07223
648645.45	4187371.83	648645.45_4187371.83	0.45442	0.20482	0.09021	0.01875	17.39157	0.40017	0.15307	0.07191
648665.45	4187371.83	648665.45_4187371.83	0.47203	0.20347	0.09002	0.01849	15.17733	0.39544	0.15296	0.07157
648685.45	4187371.83	648685.45_4187371.83	0.49033	0.20165	0.08981	0.01821	13.50259	0.3907	0.15279	0.07123
648705.45	4187371.83	648705.45_4187371.83	0.50941	0.19923	0.08956	0.01793	12.19791	0.38597	0.15251	0.07089
648725.45	4187371.83	648725.45_4187371.83	0.5294	0.19628	0.08927	0.01765	11.15427	0.38131	0.15215	0.07055
648745.45	4187371.83	648745.45_4187371.83	0.55032	0.19304	0.08894	0.01737	10.30414	0.37682	0.1517	0.07021
648765.45	4187371.83	648765.45_4187371.83	0.57223	0.18981	0.08859	0.0171	9.59579	0.37256	0.1511	0.06989
648785.45	4187371.83	648785.45_4187371.83	0.59507	0.1869	0.0882	0.01686	8.99627	0.36864	0.15039	0.06959
648805.45	4187371.83	648805.45_4187371.83	0.61866	0.18441	0.08779	0.01664	8.47763	0.36512	0.14953	0.06932
648825.45	4187371.83	648825.45_4187371.83	0.64253	0.18229	0.08735	0.01645	8.02491	0.36209	0.14855	0.06907
648845.45	4187371.83	648845.45_4187371.83	0.66609	0.18041	0.08687	0.01629	7.62322	0.35956	0.14746	0.06886
648865.45	4187371.83	648865.45_4187371.83	0.68866	0.1786	0.08637	0.01617	7.26303	0.35753	0.14621	0.06869
648885.45	4187371.83	648885.45_4187371.83	0.70948	0.17679	0.08586	0.01608	6.93593	0.356	0.14485	0.06856
648905.45	4187371.83	648905.45_4187371.83	0.72773	0.17496	0.08531	0.01603	6.63682	0.35488	0.14341	0.06848
648925.45	4187371.83	648925.45_4187371.83	0.74268	0.1731	0.08475	0.01601	6.36122	0.35413	0.14188	0.06845
648945.45	4187371.83	648945.45_4187371.83	0.75387	0.17126	0.08419	0.01601	6.10517	0.35366	0.14028	0.06846
648965.45	4187371.83	648965.45_4187371.83	0.76113	0.16946	0.08361	0.01604	5.86658	0.35341	0.13864	0.06852
648985.45	4187371.83	648985.45_4187371.83	0.76459	0.16772	0.08302	0.01608	5.64188	0.35327	0.13695	0.06863
649005.45	4187371.83	649005.45_4187371.83	0.76458	0.16602	0.08243	0.01613	5.43024	0.3532	0.13529	0.06878
649025.45	4187371.83	649025.45_4187371.83	0.76149	0.16439	0.08184	0.0162	5.23027	0.35312	0.13362	0.06896
648585.45	4187391.83	648585.45_4187391.83	0.42536	0.19868	0.08949	0.01923	40.41988	0.40079	0.15051	0.07204
648605.45	4187391.83	648605.45_4187391.83	0.44297	0.19804	0.0894	0.01903	30.5635	0.39619	0.15053	0.07174
648625.45	4187391.83	648625.45_4187391.83	0.46186	0.19731	0.08929	0.01881	24.40591	0.39164	0.15051	0.07143
648645.45	4187391.83	648645.45_4187391.83	0.48184	0.19646	0.08913	0.01857	20.30175	0.38706	0.15048	0.0711
648665.45	4187391.83	648665.45_4187391.83	0.50263	0.19545	0.08895	0.0183	17.43709	0.38249	0.15038	0.07077
648685.45	4187391.83	648685.45_4187391.83	0.52428	0.19413	0.08874	0.01803	15.32637	0.37788	0.15023	0.07043
648705.45	4187391.83	648705.45_4187391.83	0.54709	0.19232	0.08851	0.01775	13.72389	0.3733	0.14998	0.07009
648725.45	4187391.83	648725.45_4187391.83	0.57144	0.18998	0.08823	0.01747	12.46346	0.36876	0.14963	0.06975
648745.45	4187391.83	648745.45_4187391.83	0.59734	0.18718	0.08791	0.01719	11.44871	0.36436	0.14919	0.06942
648765.45	4187391.83	648765.45_4187391.83	0.62446	0.18416	0.08756	0.01693	10.61607	0.36021	0.14862	0.06911
648785.45	4187391.83	648785.45_4187391.83	0.65245	0.18122	0.08719	0.01669	9.91528	0.35637	0.14793	0.06881
648805.45	4187391.83	648805.45_4187391.83	0.6809	0.17858	0.08679	0.01648	9.31251	0.35291	0.14711	0.06855
648825.45	4187391.83	648825.45_4187391.83	0.70922	0.17633	0.08635	0.0163	8.78786	0.34993	0.14614	0.06831
648845.45	4187391.83	648845.45_4187391.83	0.73664	0.17441	0.08589	0.01615	8.32214	0.34742	0.14507	0.06811
648865.45	4187391.83	648865.45_4187391.83	0.76216	0.17268	0.0854	0.01603	7.90608	0.34543	0.14388	0.06794
648885.45	4187391.83	648885.45_4187391.83	0.78475	0.17103	0.08489	0.01595	7.52924	0.3439	0.14255	0.06782
648905.45	4187391.83	648905.45_4187391.83	0.8034	0.16937	0.08436	0.01591	7.18572	0.3428	0.14114	0.06775
648925.45	4187391.83	648925.45_4187391.83	0.81742	0.1677	0.08381	0.01589	6.87073	0.34208	0.13964	0.06773
648945.45	4187391.83	648945.45_4187391.83	0.82654	0.16602	0.08325	0.0159	6.57923	0.34164	0.13809	0.06775
648965.45	4187391.83	648965.45_4187391.83	0.83086	0.16436	0.08269	0.01593	6.3084	0.34143	0.13648	0.06781
648985.45	4187391.83	648985.45_4187391.83	0.8308	0.16274	0.08211	0.01597	6.05362	0.34136	0.13485	0.06792
649005.45	4187391.83	649005.45_4187391.83	0.82695	0.16117	0.08153	0.01603	5.81497	0.34137	0.13316	0.06807
649025.45	4187391.83	649025.45_4187391.83	0.81991	0.15964	0.08094	0.01609	5.59019	0.34141	0.13156	0.06826
649045.45	4187391.83	649045.45_4187391.83	0.81027	0.15815	0.08036	0.01615	5.37773	0.34139	0.12994	0.06848
649065.45	4187391.83	649065.45_4187391.83	0.79858	0.1567	0.07977	0.01622	5.17674	0.34126	0.12834	0.06872
648605.45	4187411.83	648605.45_4187411.83	0.46731	0.19006	0.08835	0.01886	39.24183	0.38344	0.14798	0.07095
648625.45	4187411.83	648625.45_4187411.83	0.48913	0.18944	0.08823	0.01863	30.36045	0.37911	0.14798	0.07063
648645.45	4187411.83	648645.45_4187411.83	0.51274	0.18873	0.08808	0.01839	24.54851	0.37469	0.14796	0.07031
648665.45	4187411.83	648665.45_4187411.83	0.53766	0.18793	0.0879	0.01812	20.60708	0.37024	0.14788	0.06998
648685.45	4187411.83	648685.45_4187411.83	0.56376	0.18695	0.0877	0.01785	17.81733	0.36578	0.14774	0.06964
648705.45	4187411.83	648705.45_4187411.83	0.59155	0.18564	0.08747	0.01757	15.76759	0.36132	0.14751	0.0693
648725.45	4187411.83	648725.45_4187411.83	0.62181	0.18386	0.0872	0.01729	14.19248	0.3569	0.14718	0.06897
648745.45	4187411.83	648745.45_4187411.83	0.65447	0.18158	0.08689	0.01702	12.94638	0.35261	0.14675	0.06865
648765.45	4187411.83	648765.45_4187411.83	0.68867	0.17893	0.08656	0.01677	11.93224	0.34854	0.1462	0.06834
648785.45	4187411.83	648785.45_4187411.83	0.72345	0.17613	0.0862	0.01653	11.08863	0.34478	0.14554	0.06805
648805.45	4187411.83	648805.45_4187411.83	0.75811	0.17344	0.0858	0.01633	10.36718	0.34139	0.14475	0.0678
648825.45	4187411.83	648825.45_4187411.83	0.7919	0.17106	0.08538	0.01615	9.73988	0.33844	0.14381	0.06757
648845.45	4187411.83	648845.45_4187411.83	0.82365	0.16902	0.08492	0.01601	9.1837	0.33595	0.14275	0.06737
648865.45	4187411.83	648865.45_4187411.83	0.85199	0.16728	0.08444	0.0159	8.69046	0.33397	0.1416	0.06721
648885.45	4187411.83	648885.45_4187411.83	0.87555	0.16569	0.08395	0.01583	8.24704	0.33244	0.14033	0.0671
648905.45	4187411.83	648905.45_4187411.83	0.8933	0.16416	0.08342	0.01579	7.84434	0.33135	0.13893	0.06703
648925.45	4187411.83	648925.45_4187411.83	0.90478	0.16262	0.08288	0.01577	7.47568	0.33062	0.13746	0.06701
648945.45	4187411.83	648945.45_4187411.83	0.91011	0.16108	0.08234	0.01578	7.13741	0.33021	0.13595	0.06704
648965.45	4187411.83	648965.45_4187411.83	0.90985	0.15954	0.08178	0.01581	6.82457	0.33003	0.13436	0.06711
648985.45	4187411.83	648985.45_4187411.83	0.90479	0.15802	0.08121	0.01586	6.53338	0.33002	0.13277	0.06722
649005.45	4187411.83	649005.45_4187411.83	0.89577	0.15654	0.08064	0.01592	6.26041	0.3301	0.13115	0.06738
649025.45	4187411.83	649025.45_4187411.83	0.88361	0.15511	0.08006	0.01598	6.00458	0.33022	0.12952	0.06757
649045.45	4187411.83	649045.45_4187411.83	0.86902	0.15371	0.07948	0.01604	5.7631	0.33031	0.12795	0.06779
649065.45	4187411.83	649065.45_4187411.83	0.85266	0.15235	0.07891	0.01611	5.53574	0.33033	0.12639	0.06803
648625.45	4187431.83	648625.45_4187431.83	0.51987	0.1822	0.08719	0.01845	40.03241	0.36725	0.14553	0.06985
648645.45	4187431.83	648645.45_4187431.83	0.54791	0.18159	0.08704	0.01821	31.14349	0.36298	0.14552	0.06953
648665.45	4187431.83	648665.45_4187431.83	0.57812	0.18091	0.08688	0.01794	25.32258	0.35868	0.14544	0.0692
648685.45	4187431.83	648685.45_4187431.83	0.61025	0.18016	0.08668	0.01767	21.41152	0.35433	0.14532	0.06887
648705.45	4187431.83	648705.45_4187431.83	0.64492	0.17919	0.08646	0.01739	18.64961	0.34999	0.14511	0.06854
648725.45	4187431.83	648725.45_4187431.83	0.68344	0.17788	0.0862	0.01712	16.58477	0.34569	0.14479	0.06821
648745.45	4187431.83	648745.45_4187431.83	0.72556	0.17612	0.0859	0.01685	14.98557	0.34151	0.14438	0.06789
648765.45	4187431.83	648765.45_4187431.83	0.76955	0.17392	0.08558	0.0166	13.69828	0.33753	0.14385	0.06759
648785.45	4187431.83	648785.45_4187431.83	0.81343	0.17141	0.08522	0.01638	12.63536	0.33384	0.14322	0.06731
648805.45	4187431.83	648805.45_4187431.83	0.85611	0.16882	0.08483	0.01618	11.7313	0.33049	0.14244	0.06706
648825.45	4187431.83	648825.45_4187431.83	0.89637	0.16637	0.08442	0.01601	10.95363	0.32758	0.14155	0.06683
648845.45	4187431.83	648845.45_4187431.83	0.93255	0.16422	0.08397	0.01587	10.26815	0.3251	0.1405	0.06664
648865.45	4187431.83	648865.45_4187431.83	0.96279	0.16238	0.0835	0.01577	9.66597	0.32312	0.13936	0.06649
648885.45	4187431.83	648885.45_4187431.83	0.98557	0.16079	0.08302	0.0157	9.12548	0.32157	0.13814	0.06639

648905.45	4187431.83	648905.45_4187431.83	1.00016	0.15932	0.08251	0.01567	8.64205	0.32048	0.13678	0.06633
648925.45	4187431.83	648925.45_4187431.83	1.00667	0.15789	0.08198	0.01566	8.203	0.31975	0.13535	0.06631
648945.45	4187431.83	648945.45_4187431.83	1.00586	0.15646	0.08144	0.01567	7.80372	0.31935	0.13385	0.06634
648965.45	4187431.83	648965.45_4187431.83	0.99887	0.15502	0.08089	0.01571	7.43624	0.31918	0.13232	0.06642
648985.45	4187431.83	648985.45_4187431.83	0.98694	0.15359	0.08033	0.01575	7.09714	0.3192	0.13074	0.06654
649005.45	4187431.83	649005.45_4187431.83	0.97117	0.15218	0.07977	0.01581	6.7805	0.31933	0.12917	0.06669
649025.45	4187431.83	649025.45_4187431.83	0.95259	0.15081	0.0792	0.01587	6.48564	0.31953	0.12758	0.06689
649045.45	4187431.83	649045.45_4187431.83	0.93198	0.14948	0.07863	0.01594	6.20879	0.31972	0.12603	0.06711
649065.45	4187431.83	649065.45_4187431.83	0.91009	0.1482	0.07806	0.016	5.94904	0.31985	0.1245	0.06735
648645.45	4187451.83	648645.45_4187451.83	0.58854	0.17499	0.08604	0.01803	41.77182	0.35185	0.14313	0.06877
648665.45	4187451.83	648665.45_4187451.83	0.62556	0.1744	0.08587	0.01777	32.82895	0.34771	0.14307	0.06844
648685.45	4187451.83	648685.45_4187451.83	0.66577	0.17377	0.08568	0.01749	27.04864	0.34351	0.14297	0.06811
648705.45	4187451.83	648705.45_4187451.83	0.71038	0.17304	0.08547	0.01722	22.99724	0.33927	0.14277	0.06778
648725.45	4187451.83	648725.45_4187451.83	0.76091	0.17208	0.08522	0.01695	20.0933	0.33509	0.14248	0.06746
648745.45	4187451.83	648745.45_4187451.83	0.81686	0.17076	0.08492	0.01669	17.89972	0.331	0.14207	0.06714
648765.45	4187451.83	648765.45_4187451.83	0.8746	0.16901	0.08461	0.01644	16.16827	0.32711	0.14156	0.06685
648785.45	4187451.83	648785.45_4187451.83	0.93086	0.16689	0.08426	0.01622	14.74674	0.32348	0.14095	0.06658
648805.45	4187451.83	648805.45_4187451.83	0.98358	0.16452	0.08388	0.01603	13.55713	0.32018	0.14019	0.06633
648825.45	4187451.83	648825.45_4187451.83	1.03092	0.16213	0.08347	0.01587	12.5442	0.3173	0.13934	0.06611
648845.45	4187451.83	648845.45_4187451.83	1.07056	0.15992	0.08304	0.01574	11.66568	0.31483	0.13833	0.06593
648865.45	4187451.83	648865.45_4187451.83	1.10033	0.15798	0.08258	0.01564	10.90285	0.31285	0.1372	0.06579
648885.45	4187451.83	648885.45_4187451.83	1.11909	0.15632	0.08211	0.01558	10.22784	0.31129	0.136	0.06569
648905.45	4187451.83	648905.45_4187451.83	1.12691	0.15486	0.08161	0.01555	9.62795	0.31017	0.13468	0.06563
648925.45	4187451.83	648925.45_4187451.83	1.12493	0.1535	0.08109	0.01555	9.09132	0.30942	0.13328	0.06563
648945.45	4187451.83	648945.45_4187451.83	1.11485	0.15216	0.08056	0.01556	8.60905	0.30901	0.13182	0.06566
648965.45	4187451.83	648965.45_4187451.83	1.09847	0.15081	0.08002	0.0156	8.16991	0.30885	0.13032	0.06574
648985.45	4187451.83	648985.45_4187451.83	1.07744	0.14945	0.07947	0.01565	7.76675	0.30889	0.12879	0.06586
649005.45	4187451.83	649005.45_4187451.83	1.05315	0.14809	0.07891	0.0157	7.39551	0.30907	0.12722	0.06602
649025.45	4187451.83	649025.45_4187451.83	1.02669	0.14677	0.07835	0.01577	7.05086	0.30931	0.12571	0.06622
649045.45	4187451.83	649045.45_4187451.83	0.99892	0.14548	0.07779	0.01583	6.72821	0.30958	0.12415	0.06644
649065.45	4187451.83	649065.45_4187451.83	0.97057	0.14424	0.07723	0.0159	6.42667	0.30981	0.12268	0.06669
649085.45	4187451.83	649085.45_4187451.83	0.94222	0.14304	0.07667	0.01596	6.14483	0.30995	0.1212	0.06695
648685.45	4187471.83	648685.45_4187471.83	0.73412	0.1678	0.08471	0.01732	36.5805	0.33319	0.14067	0.06736
648705.45	4187471.83	648705.45_4187471.83	0.79298	0.1672	0.08449	0.01705	30.12575	0.32911	0.14049	0.06704
648725.45	4187471.83	648725.45_4187471.83	0.86195	0.16648	0.08425	0.01678	25.65841	0.32503	0.14021	0.06672
648745.45	4187471.83	648745.45_4187471.83	0.93863	0.16551	0.08397	0.01652	22.36398	0.32105	0.13983	0.06641
648765.45	4187471.83	648765.45_4187471.83	1.01627	0.16418	0.08366	0.01628	19.81441	0.31724	0.13934	0.06612
648785.45	4187471.83	648785.45_4187471.83	1.08913	0.16246	0.08332	0.01607	17.76836	0.31368	0.13874	0.06585
648805.45	4187471.83	648805.45_4187471.83	1.15374	0.16042	0.08295	0.01588	16.09047	0.31042	0.138	0.06561
648825.45	4187471.83	648825.45_4187471.83	1.20728	0.1582	0.08255	0.01573	14.69112	0.30754	0.13717	0.06541
648845.45	4187471.83	648845.45_4187471.83	1.24702	0.156	0.08213	0.01561	13.51898	0.30511	0.1362	0.06523
648865.45	4187471.83	648865.45_4187471.83	1.27146	0.15399	0.08167	0.01552	12.51093	0.30311	0.1351	0.06509
648885.45	4187471.83	648885.45_4187471.83	1.28068	0.15225	0.08121	0.01546	11.63509	0.30153	0.13392	0.065
648905.45	4187471.83	648905.45_4187471.83	1.27638	0.15075	0.08072	0.01544	10.8716	0.30038	0.13264	0.06495
648925.45	4187471.83	648925.45_4187471.83	1.26117	0.14942	0.08021	0.01543	10.19926	0.29962	0.13126	0.06495
648945.45	4187471.83	648945.45_4187471.83	1.23785	0.14815	0.07969	0.01545	9.6018	0.29919	0.12986	0.06499
648965.45	4187471.83	648965.45_4187471.83	1.20888	0.14688	0.07916	0.01549	9.06219	0.29901	0.12837	0.06508
648985.45	4187471.83	648985.45_4187471.83	1.17624	0.1456	0.07863	0.01554	8.5739	0.29906	0.12687	0.0652
649005.45	4187471.83	649005.45_4187471.83	1.14144	0.14429	0.07808	0.0156	8.12836	0.29925	0.12535	0.06536
649025.45	4187471.83	649025.45_4187471.83	1.10556	0.143	0.07752	0.01566	7.71982	0.29954	0.12383	0.06556
649045.45	4187471.83	649045.45_4187471.83	1.06945	0.14174	0.07697	0.01573	7.34019	0.29987	0.12234	0.06578
649065.45	4187471.83	649065.45_4187471.83	1.03377	0.14051	0.07642	0.01579	6.98737	0.30018	0.12086	0.06603
649085.45	4187471.83	649085.45_4187471.83	0.99899	0.13935	0.07587	0.01586	6.65785	0.30043	0.11945	0.0663
648725.45	4187491.83	648725.45_4187491.83	1.00035	0.16114	0.08331	0.01661	35.43613	0.31547	0.138	0.06599
648745.45	4187491.83	648745.45_4187491.83	1.10875	0.16041	0.08302	0.01636	29.85309	0.31161	0.13765	0.06569
648765.45	4187491.83	648765.45_4187491.83	1.21606	0.15942	0.08273	0.01613	25.58515	0.30787	0.13717	0.0654
648785.45	4187491.83	648785.45_4187491.83	1.31022	0.15809	0.08239	0.01592	22.34895	0.30438	0.13659	0.06514
648805.45	4187491.83	648805.45_4187491.83	1.38634	0.1564	0.08204	0.01574	19.79262	0.30117	0.13586	0.06491
648825.45	4187491.83	648825.45_4187491.83	1.44117	0.15444	0.08164	0.01559	17.75163	0.29833	0.13506	0.06471
648845.45	4187491.83	648845.45_4187491.83	1.47348	0.15237	0.08123	0.01548	16.06969	0.29589	0.13413	0.06454
648865.45	4187491.83	648865.45_4187491.83	1.48378	0.15036	0.08079	0.0154	14.67553	0.29388	0.13306	0.06442
648885.45	4187491.83	648885.45_4187491.83	1.47493	0.14855	0.08033	0.01534	13.49496	0.29229	0.1319	0.06433
648905.45	4187491.83	648905.45_4187491.83	1.45104	0.14698	0.07985	0.01532	12.4821	0.29111	0.13065	0.06429
648925.45	4187491.83	648925.45_4187491.83	1.41651	0.14562	0.07935	0.01533	11.60746	0.2903	0.12932	0.06429
648945.45	4187491.83	648945.45_4187491.83	1.37519	0.14439	0.07884	0.01535	10.84535	0.28984	0.12792	0.06434
648965.45	4187491.83	648965.45_4187491.83	1.32997	0.1432	0.07832	0.01539	10.16818	0.28965	0.12648	0.06442
648985.45	4187491.83	648985.45_4187491.83	1.28293	0.14199	0.0778	0.01544	9.5613	0.28968	0.125	0.06456
649005.45	4187491.83	649005.45_4187491.83	1.23548	0.14075	0.07725	0.0155	9.01836	0.28988	0.12354	0.06472
649025.45	4187491.83	649025.45_4187491.83	1.18859	0.1395	0.07671	0.01556	8.52298	0.29019	0.12202	0.06491
649045.45	4187491.83	649045.45_4187491.83	1.14295	0.13825	0.07616	0.01562	8.06871	0.29056	0.12057	0.06514
649065.45	4187491.83	649065.45_4187491.83	1.09907	0.13704	0.07562	0.01569	7.64932	0.29094	0.11911	0.06539
649085.45	4187491.83	649085.45_4187491.83	1.05729	0.13588	0.07507	0.01575	7.26245	0.29128	0.11769	0.06565
648765.45	4187511.83	648765.45_4187511.83	1.51219	0.15478	0.08182	0.01598	35.57235	0.29897	0.13505	0.06471
648785.45	4187511.83	648785.45_4187511.83	1.63003	0.15376	0.08149	0.01578	29.83915	0.29554	0.1345	0.06445
648805.45	4187511.83	648805.45_4187511.83	1.71025	0.15242	0.08114	0.0156	25.56685	0.29237	0.13379	0.06422
648825.45	4187511.83	648825.45_4187511.83	1.75342	0.15078	0.08075	0.01546	22.33521	0.28958	0.13299	0.06403
648845.45	4187511.83	648845.45_4187511.83	1.76334	0.14892	0.08035	0.01535	19.77089	0.28714	0.13209	0.06387
648865.45	4187511.83	648865.45_4187511.83	1.7452	0.14699	0.07991	0.01527	17.71818	0.28513	0.13107	0.06375
648885.45	4187511.83	648885.45_4187511.83	1.70595	0.14516	0.07947	0.01523	16.03719	0.28351	0.12992	0.06367
648905.45	4187511.83	648905.45_4187511.83	1.65266	0.14352	0.079	0.01521	14.64219	0.2823	0.12871	0.06363
648925.45	4187511.83	648925.45_4187511.83	1.59136	0.14211	0.07851	0.01522	13.46118	0.28145	0.12742	0.06364
648945.45	4187511.83	648945.45_4187511.83	1.5265	0.14087	0.07801	0.01524	12.45165	0.28095	0.12604	0.06369
648965.45	4187511.83	648965.45_4187511.83	1.46098	0.13972	0.0775	0.01529	11.57168	0.28072	0.12464	0.06378
648985.45	4187511.83	648985.45_4187511.83	1.39658	0.13859	0.07698	0.01534	10.80153	0.28074	0.12318	0.06392
649005.45	4187511.83	649005.45_4187511.83	1.33432	0.13743	0.07644	0.01539	10.1186	0.28094	0.12173	0.06408
649025.45	4187511.83	649025.45_4187511.83	1.27486	0.13623	0.07591	0.01546	9.50559	0.28125	0.12026	0.06428

649045.45	4187511.83	649045.45_4187511.83	1.2186	0.13502	0.07537	0.01552	8.95135	0.28165	0.11882	0.06451
649065.45	4187511.83	649065.45_4187511.83	1.16576	0.13381	0.07483	0.01558	8.44573	0.28208	0.11742	0.06476
649085.45	4187511.83	649085.45_4187511.83	1.11644	0.13265	0.07429	0.01565	7.98195	0.28249	0.11602	0.06502
648785.45	4187531.83	648785.45_4187531.83	2.10366	0.14951	0.08061	0.01563	43.26135	0.28711	0.13244	0.06377
648805.45	4187531.83	648805.45_4187531.83	2.16259	0.14848	0.08027	0.01547	35.19809	0.28396	0.13175	0.06354
648825.45	4187531.83	648825.45_4187531.83	2.16926	0.14715	0.07989	0.01533	29.70848	0.28124	0.13098	0.06335
648845.45	4187531.83	648845.45_4187531.83	2.1311	0.14556	0.07948	0.01523	25.49979	0.27884	0.1301	0.0632
648865.45	4187531.83	648865.45_4187531.83	2.06284	0.1438	0.07905	0.01516	22.26261	0.27682	0.12913	0.06309
648885.45	4187531.83	648885.45_4187531.83	1.97654	0.14202	0.07862	0.01512	19.70755	0.27517	0.128	0.06302
648905.45	4187531.83	648905.45_4187531.83	1.88161	0.14035	0.07816	0.0151	17.65994	0.27392	0.1268	0.06298
648925.45	4187531.83	648925.45_4187531.83	1.78485	0.13887	0.07768	0.01511	15.98641	0.27303	0.12555	0.063
648945.45	4187531.83	648945.45_4187531.83	1.69038	0.13758	0.07719	0.01514	14.59459	0.2725	0.12421	0.06305
648965.45	4187531.83	648965.45_4187531.83	1.6003	0.13644	0.07668	0.01518	13.41164	0.27223	0.12282	0.06315
648985.45	4187531.83	648985.45_4187531.83	1.51555	0.13536	0.07617	0.01524	12.39398	0.27221	0.12141	0.06329
649005.45	4187531.83	649005.45_4187531.83	1.43645	0.13428	0.07565	0.01529	11.51155	0.27239	0.11997	0.06346
649025.45	4187531.83	649025.45_4187531.83	1.36305	0.13315	0.07512	0.01536	10.73438	0.27271	0.11854	0.06366
649045.45	4187531.83	649045.45_4187531.83	1.29526	0.13199	0.07459	0.01542	10.0422	0.27312	0.11712	0.06389
649065.45	4187531.83	649065.45_4187531.83	1.23292	0.13081	0.07406	0.01548	9.42006	0.27359	0.11572	0.06413
649085.45	4187531.83	649085.45_4187531.83	1.17573	0.12965	0.07353	0.01555	8.85413	0.27405	0.11439	0.06439
649105.45	4187531.83	649105.45_4187531.83	1.12335	0.12853	0.07299	0.01561	8.33969	0.27449	0.11306	0.06466
648825.45	4187551.83	648825.45_4187551.83	2.71637	0.14355	0.07902	0.0152	43.24664	0.27338	0.12905	0.06269
648845.45	4187551.83	648845.45_4187551.83	2.59012	0.14223	0.07864	0.01511	35.16331	0.27093	0.12816	0.06255
648865.45	4187551.83	648865.45_4187551.83	2.44173	0.1407	0.07822	0.01504	29.52937	0.26889	0.12721	0.06244
648885.45	4187551.83	648885.45_4187551.83	2.28686	0.13905	0.07779	0.01501	25.34208	0.26723	0.12612	0.06238
648905.45	4187551.83	648905.45_4187551.83	2.13588	0.13741	0.07734	0.015	22.14236	0.26595	0.12495	0.06235
648925.45	4187551.83	648925.45_4187551.83	1.9942	0.13588	0.07687	0.01501	19.61651	0.26503	0.12371	0.06237
648945.45	4187551.83	648945.45_4187551.83	1.86391	0.13454	0.07638	0.01504	17.58485	0.26444	0.12241	0.06243
648965.45	4187551.83	648965.45_4187551.83	1.74519	0.13336	0.07589	0.01508	15.9073	0.26413	0.12105	0.06253
648985.45	4187551.83	648985.45_4187551.83	1.63748	0.13229	0.07539	0.01514	14.51287	0.26408	0.11967	0.06267
649005.45	4187551.83	649005.45_4187551.83	1.53986	0.13127	0.07487	0.0152	13.3277	0.26423	0.11826	0.06284
649025.45	4187551.83	649025.45_4187551.83	1.45151	0.13021	0.07435	0.01526	12.30708	0.26453	0.11685	0.06305
649045.45	4187551.83	649045.45_4187551.83	1.37168	0.12912	0.07383	0.01532	11.42072	0.26495	0.11548	0.06327
649065.45	4187551.83	649065.45_4187551.83	1.29956	0.12799	0.0733	0.01538	10.63696	0.26544	0.11409	0.06352
649085.45	4187551.83	649085.45_4187551.83	1.23438	0.12685	0.07278	0.01544	9.93302	0.26595	0.11276	0.06378
649105.45	4187551.83	649105.45_4187551.83	1.1754	0.12573	0.07225	0.01551	9.29547	0.26643	0.11147	0.06405
648865.45	4187571.83	648865.45_4187571.83	2.87857	0.13764	0.07741	0.01493	42.36575	0.26134	0.12532	0.06181
648885.45	4187571.83	648885.45_4187571.83	2.63012	0.13617	0.07699	0.0149	34.66894	0.25964	0.12428	0.06175
648905.45	4187571.83	648905.45_4187571.83	2.40961	0.13463	0.07654	0.01489	29.31219	0.25837	0.12314	0.06173
648925.45	4187571.83	648925.45_4187571.83	2.2139	0.13311	0.07608	0.01491	25.17044	0.2574	0.12192	0.06175
648945.45	4187571.83	648945.45_4187571.83	2.04249	0.13172	0.0756	0.01494	22.01994	0.25678	0.12065	0.06182
648965.45	4187571.83	648965.45_4187571.83	1.89196	0.13049	0.0751	0.01498	19.50378	0.25642	0.11933	0.06192
648985.45	4187571.83	648985.45_4187571.83	1.75937	0.1294	0.07461	0.01504	17.46879	0.25633	0.11797	0.06206
649005.45	4187571.83	649005.45_4187571.83	1.64227	0.12839	0.0741	0.0151	15.79992	0.25644	0.1166	0.06224
649025.45	4187571.83	649025.45_4187571.83	1.53857	0.1274	0.07359	0.01516	14.40637	0.25672	0.11523	0.06244
649045.45	4187571.83	649045.45_4187571.83	1.44653	0.12638	0.07308	0.01522	13.21825	0.25713	0.11386	0.06267
649065.45	4187571.83	649065.45_4187571.83	1.36469	0.12531	0.07256	0.01528	12.19558	0.25763	0.11252	0.06292
649085.45	4187571.83	649085.45_4187571.83	1.29166	0.12421	0.07204	0.01534	11.29476	0.25816	0.1112	0.06317
649105.45	4187571.83	649105.45_4187571.83	1.22618	0.12311	0.07152	0.01541	10.48617	0.25868	0.10992	0.06344
648905.45	4187591.83	648905.45_4187591.83	2.69286	0.13195	0.07575	0.01479	42.17612	0.25117	0.12139	0.06112
648925.45	4187591.83	648925.45_4187591.83	2.43657	0.13051	0.07529	0.01481	34.69123	0.25017	0.12019	0.06115
648945.45	4187591.83	648945.45_4187591.83	2.22008	0.12911	0.07482	0.01484	29.14576	0.24947	0.11894	0.06121
648965.45	4187591.83	648965.45_4187591.83	2.03608	0.12782	0.07434	0.01489	25.04659	0.24908	0.11766	0.06132
648985.45	4187591.83	648985.45_4187591.83	1.87799	0.12669	0.07385	0.01494	21.85527	0.24894	0.11632	0.06147
649005.45	4187591.83	649005.45_4187591.83	1.74134	0.12566	0.07335	0.015	19.34559	0.24901	0.11497	0.06164
649025.45	4187591.83	649025.45_4187591.83	1.62251	0.1247	0.07284	0.01506	17.3254	0.24926	0.11364	0.06185
649045.45	4187591.83	649045.45_4187591.83	1.51869	0.12373	0.07233	0.01512	15.66521	0.24966	0.11229	0.06208
649065.45	4187591.83	649065.45_4187591.83	1.42749	0.12274	0.07182	0.01518	14.26727	0.25014	0.11097	0.06232
649085.45	4187591.83	649085.45_4187591.83	1.34678	0.1217	0.07132	0.01524	13.05548	0.25066	0.10968	0.06258
649105.45	4187591.83	649105.45_4187591.83	1.27543	0.12064	0.0708	0.01531	12.02911	0.25125	0.10844	0.06285
649125.45	4187591.83	649125.45_4187591.83	1.21146	0.11958	0.0703	0.01539	11.0968	0.25178	0.1072	0.06311
648945.45	4187611.83	648945.45_4187611.83	2.38999	0.12665	0.07406	0.01474	41.9113	0.24252	0.11729	0.06062
648965.45	4187611.83	648965.45_4187611.83	2.17272	0.12535	0.07358	0.01479	34.38784	0.24208	0.11602	0.06074
648985.45	4187611.83	648985.45_4187611.83	1.98999	0.12416	0.0731	0.01485	28.88748	0.24189	0.11472	0.06088
649005.45	4187611.83	649005.45_4187611.83	1.83474	0.12309	0.07261	0.0149	24.7814	0.24191	0.11338	0.06106
649025.45	4187611.83	649025.45_4187611.83	1.70177	0.12212	0.07211	0.01496	21.63454	0.24213	0.11207	0.06127
649045.45	4187611.83	649045.45_4187611.83	1.58701	0.12119	0.07161	0.01502	19.15901	0.24249	0.11075	0.0615
649065.45	4187611.83	649065.45_4187611.83	1.48713	0.12025	0.07111	0.01508	17.13769	0.24295	0.10945	0.06174
649085.45	4187611.83	649085.45_4187611.83	1.3995	0.11928	0.07061	0.01514	15.45909	0.24349	0.10817	0.062
649105.45	4187611.83	649105.45_4187611.83	1.32238	0.11827	0.0701	0.01521	14.0567	0.24408	0.10695	0.06226
649125.45	4187611.83	649125.45_4187611.83	1.25364	0.11725	0.0696	0.01529	12.82734	0.24465	0.10576	0.06252
648985.45	4187631.83	648985.45_4187631.83	2.09184	0.12181	0.07237	0.01475	41.30803	0.23515	0.11315	0.06031
649005.45	4187631.83	649005.45_4187631.83	1.92022	0.1207	0.07189	0.01481	33.92242	0.23513	0.11184	0.06048
649025.45	4187631.83	649025.45_4187631.83	1.77487	0.11969	0.07139	0.01487	28.55375	0.23531	0.11054	0.06069
649045.45	4187631.83	649045.45_4187631.83	1.65044	0.11875	0.0709	0.01493	24.50512	0.23563	0.10924	0.06092
649065.45	4187631.83	649065.45_4187631.83	1.54298	0.11785	0.0704	0.01498	21.39419	0.23608	0.10797	0.06117
649085.45	4187631.83	649085.45_4187631.83	1.44938	0.11693	0.0699	0.01505	18.94348	0.23663	0.10672	0.06142
649105.45	4187631.83	649105.45_4187631.83	1.36671	0.11598	0.06941	0.01511	16.87774	0.23719	0.10548	0.06169
649125.45	4187631.83	649125.45_4187631.83	1.29391	0.11501	0.06891	0.01519	15.20836	0.23782	0.10432	0.06194
649025.45	4187651.83	649025.45_4187651.83	1.8402	0.11741	0.07069	0.01477	40.80702	0.22878	0.10904	0.06013
649045.45	4187651.83	649045.45_4187651.83	1.70802	0.11644	0.0702	0.01483	33.5533	0.22908	0.10778	0.06036
649065.45	4187651.83	649065.45_4187651.83	1.59432	0.11554	0.06969	0.01489	28.35969	0.22953	0.10653	0.0606
649085.45	4187651.83	649085.45_4187651.83	1.49478	0.11465	0.06922	0.01495	24.15611	0.22998	0.10529	0.06086
649105.45	4187651.83	649105.45_4187651.83	1.40812	0.11376	0.06873	0.01502	21.07878	0.23058	0.1041	0.06112
649125.45	4187651.83	649125.45_4187651.83	1.33126	0.11284	0.06824	0.01509	18.576	0.23121	0.10294	0.06137
649065.45	4187671.83	649065.45_4187671.83	1.64004	0.11334	0.06902	0.01479	40.55252	0.2232	0.10511	0.06005
649085.45	4187671.83	649085.45_4187671.83	1.53626	0.11246	0.06855	0.01485	33.12358	0.22365	0.10388	0.06031

649105.45	4187671.83	649105.45_4187671.83	1.44592	0.11161	0.06806	0.01492	27.86996	0.22424	0.10274	0.06056
649125.45	4187671.83	649125.45_4187671.83	1.3656	0.11074	0.06757	0.01499	23.78796	0.22486	0.10162	0.06081
649145.45	4187671.83	649145.45_4187671.83	1.29397	0.10985	0.06709	0.01508	20.58197	0.2255	0.10049	0.06106
649105.45	4187691.83	649105.45_4187691.83	1.47929	0.10952	0.0674	0.01482	39.93041	0.21814	0.10137	0.06002
649125.45	4187691.83	649125.45_4187691.83	1.39632	0.10869	0.06692	0.0149	32.57276	0.21876	0.10027	0.06027
649145.45	4187691.83	649145.45_4187691.83	1.32226	0.10785	0.06644	0.01498	27.17369	0.21941	0.0992	0.06051
649145.45	4187711.83	649145.45_4187711.83	1.34671	0.10591	0.06581	0.01489	38.65609	0.21351	0.09789	0.05996
649748.61	4182643.03	649748.61_4182643.03	0.02688	0.83476	0.20365	3.83446	0.04258	0.06826	0.10596	0.22576
647522.75	4185259.9	647522.75_4185259.9	0.05021	0.45607	0.4479	0.05876	0.09154	0.18121	0.36153	0.23063
647542.75	4185259.9	647542.75_4185259.9	0.05041	0.4706	0.45861	0.05935	0.09306	0.18378	0.3709	0.2338
647562.75	4185259.9	647562.75_4185259.9	0.0506	0.48605	0.4697	0.05993	0.09448	0.18656	0.38065	0.237
647582.75	4185259.9	647582.75_4185259.9	0.05079	0.5022	0.48115	0.06047	0.0957	0.18959	0.39083	0.24022
647602.75	4185259.9	647602.75_4185259.9	0.05097	0.51879	0.49302	0.06098	0.09677	0.19287	0.40155	0.24344
647622.75	4185259.9	647622.75_4185259.9	0.05115	0.53562	0.50531	0.06144	0.09762	0.19644	0.41265	0.24668
647642.75	4185259.9	647642.75_4185259.9	0.05133	0.55258	0.51804	0.06186	0.09832	0.20025	0.42431	0.24993
647522.75	4185279.9	647522.75_4185279.9	0.05056	0.47437	0.44414	0.05846	0.09204	0.18446	0.36587	0.22868
647542.75	4185279.9	647542.75_4185279.9	0.05077	0.49029	0.45455	0.05901	0.09368	0.18703	0.37524	0.23172
647562.75	4185279.9	647562.75_4185279.9	0.05097	0.50725	0.46532	0.05955	0.09513	0.18979	0.38497	0.23476
647582.75	4185279.9	647582.75_4185279.9	0.05116	0.5249	0.4764	0.06004	0.09647	0.19276	0.39513	0.2378
647602.75	4185279.9	647602.75_4185279.9	0.05134	0.54305	0.48787	0.0605	0.09761	0.19599	0.40579	0.24086
647622.75	4185279.9	647622.75_4185279.9	0.05152	0.56163	0.49976	0.06091	0.09859	0.19953	0.41692	0.24393
647642.75	4185279.9	647642.75_4185279.9	0.05171	0.58054	0.51212	0.06128	0.09939	0.20337	0.42876	0.24702
647522.75	4185299.9	647522.75_4185299.9	0.05092	0.49488	0.4401	0.05813	0.09255	0.18789	0.37151	0.2266
647542.75	4185299.9	647542.75_4185299.9	0.05113	0.51224	0.45019	0.05865	0.09422	0.19042	0.38084	0.22949
647562.75	4185299.9	647562.75_4185299.9	0.05133	0.53077	0.46059	0.05913	0.09579	0.19313	0.39051	0.23237
647582.75	4185299.9	647582.75_4185299.9	0.05153	0.55018	0.47132	0.05958	0.09723	0.19608	0.40067	0.23526
647602.75	4185299.9	647602.75_4185299.9	0.05174	0.57023	0.48242	0.05999	0.09848	0.19929	0.41131	0.23817
647622.75	4185299.9	647622.75_4185299.9	0.05194	0.59101	0.49395	0.06036	0.09958	0.20282	0.42251	0.24108
647642.75	4185299.9	647642.75_4185299.9	0.05212	0.61237	0.50598	0.06067	0.10046	0.2067	0.43445	0.24402
647502.75	4185319.9	647502.75_4185319.9	0.05109	0.50077	0.42627	0.05729	0.09126	0.18921	0.36975	0.22173
647522.75	4185319.9	647522.75_4185319.9	0.05132	0.5184	0.43583	0.0578	0.09307	0.19161	0.37875	0.22449
647542.75	4185319.9	647542.75_4185319.9	0.05153	0.53764	0.44569	0.05828	0.09483	0.19413	0.38811	0.22722
647562.75	4185319.9	647562.75_4185319.9	0.05174	0.55839	0.45584	0.05873	0.09652	0.19687	0.39789	0.22998
647582.75	4185319.9	647582.75_4185319.9	0.05195	0.58023	0.46629	0.05914	0.09802	0.19982	0.40819	0.23273
647602.75	4185319.9	647602.75_4185319.9	0.05215	0.60283	0.4771	0.0595	0.09942	0.20303	0.41893	0.23547
647622.75	4185319.9	647622.75_4185319.9	0.05235	0.62601	0.48828	0.0598	0.10058	0.20651	0.43014	0.23824
647642.75	4185319.9	647642.75_4185319.9	0.05254	0.64935	0.49982	0.06004	0.10157	0.21027	0.44187	0.24098
647482.75	4185339.9	647482.75_4185339.9	0.05119	0.50809	0.41317	0.05644	0.08982	0.19062	0.36923	0.21689
647502.75	4185339.9	647502.75_4185339.9	0.05143	0.52525	0.42217	0.05695	0.09165	0.19289	0.37798	0.21951
647522.75	4185339.9	647522.75_4185339.9	0.05169	0.54499	0.4314	0.05744	0.09358	0.19543	0.38731	0.2222
647542.75	4185339.9	647542.75_4185339.9	0.05192	0.56654	0.44099	0.05788	0.0954	0.19799	0.39689	0.22482
647562.75	4185339.9	647562.75_4185339.9	0.05213	0.58945	0.45082	0.05828	0.09711	0.20065	0.40673	0.22739
647582.75	4185339.9	647582.75_4185339.9	0.05234	0.61361	0.46094	0.05863	0.09873	0.20355	0.41707	0.22999
647602.75	4185339.9	647602.75_4185339.9	0.05254	0.63885	0.47139	0.05893	0.10021	0.20672	0.42788	0.23258
647622.75	4185339.9	647622.75_4185339.9	0.05276	0.66477	0.4822	0.05918	0.10149	0.21014	0.43912	0.23519
647642.75	4185339.9	647642.75_4185339.9	0.05297	0.6913	0.49343	0.05936	0.10261	0.21389	0.45096	0.2378
647442.75	4185359.9	647442.75_4185359.9	0.05104	0.50183	0.3924	0.05509	0.08675	0.19034	0.36159	0.20973
647462.75	4185359.9	647462.75_4185359.9	0.05129	0.51773	0.40065	0.05562	0.08844	0.19239	0.36992	0.21223
647482.75	4185359.9	647482.75_4185359.9	0.05154	0.53464	0.40912	0.05611	0.0902	0.19453	0.37856	0.21471
647502.75	4185359.9	647502.75_4185359.9	0.05178	0.55355	0.41784	0.05658	0.09207	0.19682	0.3876	0.2172
647522.75	4185359.9	647522.75_4185359.9	0.05205	0.57535	0.42686	0.05703	0.09399	0.19933	0.39709	0.21973
647542.75	4185359.9	647542.75_4185359.9	0.05229	0.59936	0.43614	0.05744	0.09588	0.20189	0.40686	0.22223
647562.75	4185359.9	647562.75_4185359.9	0.0525	0.62492	0.44563	0.05778	0.09771	0.20455	0.41696	0.22467
647582.75	4185359.9	647582.75_4185359.9	0.05272	0.65191	0.45542	0.05808	0.09944	0.20742	0.42744	0.22714
647602.75	4185359.9	647602.75_4185359.9	0.05295	0.67979	0.46549	0.05833	0.10097	0.21048	0.4383	0.22956
647622.75	4185359.9	647622.75_4185359.9	0.05303	0.70861	0.47586	0.0585	0.10244	0.21379	0.4496	0.23202
647642.75	4185359.9	647642.75_4185359.9	0.05321	0.73864	0.48672	0.05862	0.10396	0.21698	0.46154	0.23451
647402.75	4185379.9	647402.75_4185379.9	0.05084	0.49309	0.37334	0.05376	0.08437	0.19087	0.35496	0.20291
647422.75	4185379.9	647422.75_4185379.9	0.0511	0.51058	0.38091	0.05429	0.08571	0.19261	0.36296	0.20529
647442.75	4185379.9	647442.75_4185379.9	0.05137	0.52817	0.3887	0.05481	0.08721	0.19452	0.37132	0.20768
647462.75	4185379.9	647462.75_4185379.9	0.05164	0.5462	0.39671	0.0553	0.08885	0.19656	0.37997	0.21007
647482.75	4185379.9	647482.75_4185379.9	0.05188	0.56518	0.40492	0.05576	0.09059	0.19866	0.38889	0.21241
647502.75	4185379.9	647502.75_4185379.9	0.05212	0.58583	0.41329	0.05618	0.09247	0.20085	0.39806	0.21475
647522.75	4185379.9	647522.75_4185379.9	0.05241	0.61089	0.42216	0.0566	0.09444	0.20345	0.40798	0.2172
647542.75	4185379.9	647542.75_4185379.9	0.05264	0.63702	0.43107	0.05695	0.09636	0.20592	0.41791	0.21952
647562.75	4185379.9	647562.75_4185379.9	0.05267	0.66215	0.43978	0.05721	0.09827	0.20758	0.42748	0.22169
647582.75	4185379.9	647582.75_4185379.9	0.05272	0.68829	0.44811	0.05743	0.09981	0.20843	0.4344	0.22386
647262.75	4185399.9	647262.75_4185399.9	0.04936	0.39605	0.32332	0.0496	0.07971	0.18732	0.314	0.18518
647282.75	4185399.9	647282.75_4185399.9	0.04961	0.41076	0.3295	0.05018	0.08022	0.18814	0.32047	0.18741
647302.75	4185399.9	647302.75_4185399.9	0.04987	0.42608	0.33582	0.05076	0.08076	0.18906	0.32719	0.18967
647322.75	4185399.9	647322.75_4185399.9	0.05013	0.44197	0.34231	0.05134	0.08139	0.1901	0.33415	0.19193
647342.75	4185399.9	647342.75_4185399.9	0.05039	0.45888	0.34897	0.0519	0.08211	0.19125	0.34137	0.1942
647362.75	4185399.9	647362.75_4185399.9	0.05065	0.47719	0.35579	0.05245	0.08291	0.1925	0.3488	0.19646
647382.75	4185399.9	647382.75_4185399.9	0.05091	0.49679	0.36277	0.05299	0.08386	0.19389	0.35652	0.19873
647402.75	4185399.9	647402.75_4185399.9	0.05117	0.51702	0.36993	0.05351	0.08498	0.19542	0.36452	0.20099
647422.75	4185399.9	647422.75_4185399.9	0.05144	0.53728	0.37728	0.05401	0.08626	0.1971	0.37281	0.20325
647442.75	4185399.9	647442.75_4185399.9	0.05171	0.55762	0.38485	0.0545	0.0877	0.19896	0.38146	0.20552
647462.75	4185399.9	647462.75_4185399.9	0.05198	0.5786	0.39264	0.05496	0.08933	0.20097	0.39046	0.20781
647482.75	4185399.9	647482.75_4185399.9	0.05224	0.60055	0.4006	0.05538	0.09107	0.20305	0.3997	0.21004
647502.75	4185399.9	647502.75_4185399.9	0.05248	0.62409	0.40871	0.05576	0.09288	0.2052	0.4092	0.21225
647522.75	4185399.9	647522.75_4185399.9	0.05252	0.64751	0.41668	0.05608	0.09456	0.20569	0.41849	0.21434
647222.75	4185419.9	647222.75_4185419.9	0.04917	0.3838	0.30946	0.04835	0.07973	0.19111	0.30864	0.17955
647242.75	4185419.9	647242.75_4185419.9	0.04942	0.39663	0.3152	0.04892	0.0802	0.19182	0.31496	0.18168
647262.75	4185419.9	647262.75_4185419.9	0.04969	0.4109	0.32106	0.0495	0.08069	0.19264	0.32158	0.18388
647282.75	4185419.9	647282.75_4185419.9	0.04993	0.42601	0.32709	0.05005	0.08113	0.19336	0.32826	0.18598
647302.75	4185419.9	647302.75_4185419.9	0.05019	0.44197	0.33325	0.05061	0.08166	0.19424	0.33527	0.18814

647322.75	4185419.9	647322.75_4185419.9	0.05045	0.45861	0.33957	0.05117	0.08225	0.19523	0.34253	0.19031
647342.75	4185419.9	647342.75_4185419.9	0.0507	0.47634	0.346	0.0517	0.08289	0.19627	0.34998	0.19246
647362.75	4185419.9	647362.75_4185419.9	0.05097	0.4963	0.35264	0.05223	0.08368	0.19749	0.35778	0.19464
647382.75	4185419.9	647382.75_4185419.9	0.05123	0.51812	0.35941	0.05274	0.0846	0.1988	0.36581	0.1968
647402.75	4185419.9	647402.75_4185419.9	0.05132	0.53899	0.36599	0.05319	0.08543	0.19987	0.37354	0.1988
647422.75	4185419.9	647422.75_4185419.9	0.05176	0.56512	0.37346	0.0537	0.08683	0.20183	0.38276	0.2011
647442.75	4185419.9	647442.75_4185419.9	0.05205	0.58998	0.38087	0.05416	0.08825	0.2037	0.39191	0.20328
647462.75	4185419.9	647462.75_4185419.9	0.05233	0.6156	0.38848	0.0546	0.08983	0.20571	0.4014	0.20547
647482.75	4185419.9	647482.75_4185419.9	0.05257	0.64078	0.39609	0.05497	0.09148	0.20763	0.41087	0.20754
647502.75	4185419.9	647502.75_4185419.9	0.05235	0.66091	0.40267	0.05525	0.09155	0.2063	0.41845	0.20937
647202.75	4185439.9	647202.75_4185439.9	0.04925	0.38566	0.30192	0.0477	0.08022	0.19588	0.30948	0.17627
647222.75	4185439.9	647222.75_4185439.9	0.0495	0.39848	0.30738	0.04825	0.08069	0.19661	0.31579	0.17831
647242.75	4185439.9	647242.75_4185439.9	0.04974	0.41244	0.31297	0.0488	0.08113	0.19734	0.3223	0.18035
647262.75	4185439.9	647262.75_4185439.9	0.05002	0.42794	0.31872	0.04937	0.08165	0.19818	0.32915	0.18245
647282.75	4185439.9	647282.75_4185439.9	0.05027	0.44435	0.32458	0.04992	0.08213	0.19898	0.33613	0.18451
647302.75	4185439.9	647302.75_4185439.9	0.0505	0.46095	0.3305	0.05044	0.0826	0.19971	0.34325	0.18653
647322.75	4185439.9	647322.75_4185439.9	0.05071	0.47807	0.33656	0.05096	0.08313	0.20056	0.35066	0.18857
647342.75	4185439.9	647342.75_4185439.9	0.05095	0.49616	0.34275	0.05146	0.08373	0.20148	0.35829	0.19059
647362.75	4185439.9	647362.75_4185439.9	0.05124	0.51747	0.34924	0.05197	0.0845	0.2027	0.3665	0.19268
647382.75	4185439.9	647382.75_4185439.9	0.05141	0.53939	0.35563	0.05244	0.08517	0.20374	0.37454	0.19468
647402.75	4185439.9	647402.75_4185439.9	0.05133	0.56125	0.36145	0.05287	0.08475	0.20214	0.38273	0.19656
647422.75	4185439.9	647422.75_4185439.9	0.0517	0.58894	0.36887	0.05332	0.08582	0.20379	0.3919	0.19865
647442.75	4185439.9	647442.75_4185439.9	0.05237	0.62424	0.37679	0.05381	0.08887	0.20877	0.40227	0.20096
647462.75	4185439.9	647462.75_4185439.9	0.0525	0.65281	0.38387	0.05418	0.09019	0.21036	0.41158	0.20292
647182.75	4185459.9	647182.75_4185459.9	0.04934	0.38499	0.29463	0.04706	0.08064	0.20066	0.30977	0.17309
647202.75	4185459.9	647202.75_4185459.9	0.04958	0.39832	0.29987	0.0476	0.08113	0.20149	0.31608	0.17502
647222.75	4185459.9	647222.75_4185459.9	0.04982	0.41263	0.3052	0.04814	0.08164	0.2023	0.32262	0.17698
647242.75	4185459.9	647242.75_4185459.9	0.05006	0.42802	0.3106	0.04867	0.0821	0.20303	0.32932	0.17892
647262.75	4185459.9	647262.75_4185459.9	0.05033	0.44534	0.31621	0.04922	0.08261	0.20391	0.33643	0.18093
647282.75	4185459.9	647282.75_4185459.9	0.05062	0.46416	0.32196	0.04977	0.08313	0.20486	0.34384	0.18296
647302.75	4185459.9	647302.75_4185459.9	0.05085	0.48293	0.32773	0.05027	0.08358	0.20562	0.35124	0.18489
647322.75	4185459.9	647322.75_4185459.9	0.05104	0.50146	0.33353	0.05075	0.08409	0.20633	0.35877	0.18677
647342.75	4185459.9	647342.75_4185459.9	0.05119	0.52015	0.33935	0.05122	0.08436	0.20599	0.36639	0.18866
647362.75	4185459.9	647362.75_4185459.9	0.05124	0.54126	0.34542	0.05168	0.08447	0.20621	0.37483	0.19056
647382.75	4185459.9	647382.75_4185459.9	0.05166	0.56677	0.35193	0.05215	0.08539	0.20771	0.3834	0.19258
647402.75	4185459.9	647402.75_4185459.9	0.05155	0.59	0.35766	0.05256	0.08551	0.2072	0.39221	0.19436
647422.75	4185459.9	647422.75_4185459.9	0.05151	0.61479	0.36304	0.05297	0.08601	0.2074	0.40047	0.19678
647442.75	4185459.9	647442.75_4185459.9	0.05216	0.65277	0.37146	0.05337	0.08756	0.21024	0.41146	0.1983
647022.75	4185479.9	647022.75_4185479.9	0.04759	0.30523	0.25566	0.04283	0.07685	0.19583	0.27008	0.15696
647042.75	4185479.9	647042.75_4185479.9	0.04784	0.31356	0.25994	0.04332	0.07745	0.19736	0.27516	0.15876
647062.75	4185479.9	647062.75_4185479.9	0.0481	0.32232	0.26431	0.04381	0.07804	0.19884	0.28041	0.16058
647082.75	4185479.9	647082.75_4185479.9	0.04836	0.33155	0.26879	0.04432	0.07864	0.20025	0.28582	0.16243
647102.75	4185479.9	647102.75_4185479.9	0.04862	0.3418	0.27335	0.04484	0.07924	0.20161	0.29143	0.16429
647122.75	4185479.9	647122.75_4185479.9	0.04889	0.35367	0.27802	0.04537	0.07983	0.20289	0.29722	0.16617
647142.75	4185479.9	647142.75_4185479.9	0.04915	0.36712	0.28278	0.0459	0.08041	0.20411	0.30319	0.16806
647162.75	4185479.9	647162.75_4185479.9	0.04941	0.38132	0.28766	0.04644	0.08098	0.20523	0.30933	0.16994
647182.75	4185479.9	647182.75_4185479.9	0.04966	0.39556	0.29265	0.04697	0.08153	0.20628	0.31566	0.17182
647202.75	4185479.9	647202.75_4185479.9	0.04991	0.41011	0.29774	0.0475	0.08207	0.20726	0.32221	0.1737
647222.75	4185479.9	647222.75_4185479.9	0.05015	0.42561	0.30288	0.04802	0.08255	0.20814	0.32892	0.17556
647242.75	4185479.9	647242.75_4185479.9	0.05041	0.44296	0.3082	0.04855	0.08307	0.20908	0.33597	0.17747
647262.75	4185479.9	647262.75_4185479.9	0.05069	0.46238	0.31367	0.04909	0.08362	0.21007	0.34335	0.1794
647282.75	4185479.9	647282.75_4185479.9	0.05096	0.48324	0.31921	0.04959	0.08415	0.21096	0.35088	0.18128
647302.75	4185479.9	647302.75_4185479.9	0.0512	0.50498	0.32483	0.05008	0.08464	0.2118	0.35861	0.18315
647322.75	4185479.9	647322.75_4185479.9	0.05137	0.52593	0.33038	0.05053	0.08509	0.21242	0.36626	0.18492
647342.75	4185479.9	647342.75_4185479.9	0.05149	0.54768	0.33602	0.05097	0.08518	0.2119	0.37416	0.18671
647362.75	4185479.9	647362.75_4185479.9	0.05134	0.5699	0.34134	0.0514	0.08528	0.21135	0.38319	0.18843
647382.75	4185479.9	647382.75_4185479.9	0.05148	0.59588	0.34676	0.05183	0.08571	0.21183	0.3919	0.19025
647402.75	4185479.9	647402.75_4185479.9	0.05179	0.62595	0.35385	0.05224	0.08637	0.21298	0.40133	0.19212
647422.75	4185479.9	647422.75_4185479.9	0.05186	0.65421	0.35919	0.05262	0.08692	0.2134	0.41039	0.19449
647022.75	4185499.9	647022.75_4185499.9	0.0479	0.31315	0.25438	0.04277	0.0776	0.20006	0.27439	0.1561
647042.75	4185499.9	647042.75_4185499.9	0.04815	0.32169	0.25856	0.04324	0.07819	0.2018	0.27957	0.15785
647062.75	4185499.9	647062.75_4185499.9	0.04841	0.33088	0.26285	0.04374	0.0788	0.20349	0.28494	0.15962
647082.75	4185499.9	647082.75_4185499.9	0.04867	0.34056	0.26722	0.04425	0.07941	0.20508	0.29047	0.16142
647102.75	4185499.9	647102.75_4185499.9	0.04894	0.35097	0.27169	0.04476	0.08004	0.20663	0.29619	0.16322
647122.75	4185499.9	647122.75_4185499.9	0.04921	0.36282	0.27625	0.04529	0.08066	0.2081	0.3021	0.16504
647142.75	4185499.9	647142.75_4185499.9	0.04947	0.3765	0.28092	0.04582	0.08126	0.20949	0.30821	0.16686
647162.75	4185499.9	647162.75_4185499.9	0.04973	0.39148	0.28568	0.04634	0.08186	0.21079	0.31452	0.16867
647182.75	4185499.9	647182.75_4185499.9	0.04998	0.40677	0.29051	0.04686	0.08244	0.21199	0.32103	0.17048
647202.75	4185499.9	647202.75_4185499.9	0.05025	0.42238	0.29547	0.04738	0.08301	0.21315	0.32778	0.1723
647222.75	4185499.9	647222.75_4185499.9	0.05051	0.43922	0.30053	0.0479	0.08357	0.21428	0.33481	0.17412
647242.75	4185499.9	647242.75_4185499.9	0.05079	0.45803	0.30573	0.04843	0.08412	0.21541	0.34213	0.17597
647262.75	4185499.9	647262.75_4185499.9	0.05104	0.47871	0.31098	0.04892	0.08466	0.21638	0.34958	0.17776
647282.75	4185499.9	647282.75_4185499.9	0.05129	0.50138	0.31632	0.0494	0.08514	0.21729	0.35726	0.17953
647302.75	4185499.9	647302.75_4185499.9	0.05148	0.52473	0.32166	0.04985	0.08562	0.21802	0.365	0.18126
647322.75	4185499.9	647322.75_4185499.9	0.05177	0.55	0.3272	0.0503	0.08613	0.21889	0.37318	0.18301
647342.75	4185499.9	647342.75_4185499.9	0.05171	0.57535	0.33266	0.05072	0.08619	0.21854	0.38156	0.1847
647362.75	4185499.9	647362.75_4185499.9	0.05182	0.60357	0.33807	0.05113	0.08648	0.21882	0.39127	0.18639
647382.75	4185499.9	647382.75_4185499.9	0.05162	0.62992	0.34277	0.05152	0.08663	0.21784	0.39968	0.18859
647402.75	4185499.9	647402.75_4185499.9	0.052	0.66587	0.34924	0.0519	0.08725	0.219	0.40953	0.19009
647022.75	4185519.9	647022.75_4185519.9	0.04822	0.3227	0.25303	0.04271	0.07837	0.20419	0.27817	0.15521
647042.75	4185519.9	647042.75_4185519.9	0.04848	0.33151	0.25711	0.04318	0.07897	0.20615	0.28349	0.15692
647062.75	4185519.9	647062.75_4185519.9	0.04873	0.34106	0.26129	0.04368	0.0796	0.20805	0.28898	0.15863
647082.75	4185519.9	647082.75_4185519.9	0.049	0.35131	0.26556	0.04418	0.08023	0.20989	0.29467	0.16036
647102.75	4185519.9	647102.75_4185519.9	0.04926	0.36221	0.26992	0.04469	0.08087	0.21166	0.30055	0.1621
647122.75	4185519.9	647122.75_4185519.9	0.04953	0.37424	0.27439	0.04521	0.0815	0.21334	0.30662	0.16385
647142.75	4185519.9	647142.75_4185519.9	0.0498	0.38812	0.27893	0.04573	0.08212	0.21493	0.31288	0.1656

647162.75	4185519.9	647162.75_4185519.9	0.05006	0.40383	0.28357	0.04624	0.08275	0.21645	0.31934	0.16736
647182.75	4185519.9	647182.75_4185519.9	0.05034	0.42045	0.2883	0.04676	0.08337	0.2179	0.32603	0.16911
647202.75	4185519.9	647202.75_4185519.9	0.05061	0.43742	0.29315	0.04728	0.08399	0.2193	0.33298	0.17087
647222.75	4185519.9	647222.75_4185519.9	0.05088	0.45526	0.29807	0.04778	0.08459	0.22061	0.34013	0.17262
647242.75	4185519.9	647242.75_4185519.9	0.05114	0.47491	0.30309	0.04827	0.08514	0.2218	0.34748	0.17434
647262.75	4185519.9	647262.75_4185519.9	0.05139	0.49675	0.30815	0.04874	0.08569	0.22286	0.35503	0.17603
647282.75	4185519.9	647282.75_4185519.9	0.05157	0.51985	0.31319	0.04917	0.08614	0.22366	0.36258	0.17765
647302.75	4185519.9	647302.75_4185519.9	0.05156	0.54337	0.31814	0.04959	0.08635	0.22381	0.37143	0.17922
647322.75	4185519.9	647322.75_4185519.9	0.052	0.57321	0.32376	0.05004	0.087	0.22513	0.37891	0.18099
647342.75	4185519.9	647342.75_4185519.9	0.05223	0.60426	0.32931	0.05046	0.08741	0.22574	0.38768	0.18268
647362.75	4185519.9	647362.75_4185519.9	0.05216	0.63584	0.33454	0.05083	0.08763	0.22562	0.39815	0.18426
647382.75	4185519.9	647382.75_4185519.9	0.05209	0.66833	0.33919	0.05119	0.08782	0.22515	0.40702	0.18625
647022.75	4185539.9	647022.75_4185539.9	0.04857	0.33379	0.25161	0.04266	0.07918	0.20812	0.28161	0.15432
647042.75	4185539.9	647042.75_4185539.9	0.04883	0.34315	0.25562	0.04314	0.07981	0.21041	0.28702	0.15597
647062.75	4185539.9	647062.75_4185539.9	0.04909	0.35318	0.25971	0.04363	0.08045	0.21264	0.29259	0.15764
647082.75	4185539.9	647082.75_4185539.9	0.04935	0.36407	0.26388	0.04413	0.08111	0.21473	0.29833	0.15931
647102.75	4185539.9	647102.75_4185539.9	0.04962	0.3758	0.26814	0.04463	0.08178	0.21674	0.30427	0.16098
647122.75	4185539.9	647122.75_4185539.9	0.0499	0.38847	0.27249	0.04514	0.08244	0.21869	0.31041	0.16267
647142.75	4185539.9	647142.75_4185539.9	0.05017	0.40279	0.27691	0.04565	0.08308	0.22053	0.31675	0.16435
647162.75	4185539.9	647162.75_4185539.9	0.05044	0.4193	0.28142	0.04616	0.08369	0.22228	0.32331	0.16602
647182.75	4185539.9	647182.75_4185539.9	0.05071	0.4373	0.28601	0.04665	0.08434	0.22393	0.3301	0.16768
647202.75	4185539.9	647202.75_4185539.9	0.05097	0.45572	0.29068	0.04714	0.08495	0.22546	0.33713	0.16934
647222.75	4185539.9	647222.75_4185539.9	0.05123	0.47479	0.29545	0.04762	0.08555	0.22691	0.34441	0.17099
647242.75	4185539.9	647242.75_4185539.9	0.0515	0.49589	0.30034	0.0481	0.08615	0.22833	0.35196	0.17265
647262.75	4185539.9	647262.75_4185539.9	0.05173	0.51871	0.30519	0.04853	0.08668	0.22945	0.35952	0.17422
647282.75	4185539.9	647282.75_4185539.9	0.0519	0.54291	0.31001	0.04894	0.08714	0.23029	0.36704	0.17574
647302.75	4185539.9	647302.75_4185539.9	0.05192	0.56944	0.3149	0.04935	0.08742	0.23085	0.37661	0.17728
647322.75	4185539.9	647322.75_4185539.9	0.05219	0.60123	0.32027	0.04977	0.08795	0.23195	0.38513	0.17893
647342.75	4185539.9	647342.75_4185539.9	0.05218	0.63317	0.32534	0.05014	0.08834	0.23217	0.3943	0.18048
647362.75	4185539.9	647362.75_4185539.9	0.0522	0.66659	0.32993	0.0505	0.08858	0.23191	0.40312	0.18238
647022.75	4185559.9	647022.75_4185559.9	0.04888	0.34583	0.25007	0.04259	0.07994	0.21165	0.28426	0.15332
647042.75	4185559.9	647042.75_4185559.9	0.04915	0.35597	0.254	0.04307	0.08062	0.21431	0.28971	0.15492
647062.75	4185559.9	647062.75_4185559.9	0.04941	0.36658	0.25797	0.04356	0.08127	0.21682	0.29528	0.15651
647082.75	4185559.9	647082.75_4185559.9	0.0497	0.37836	0.26209	0.04407	0.08197	0.21932	0.30114	0.15817
647102.75	4185559.9	647102.75_4185559.9	0.04996	0.39084	0.2662	0.04455	0.08263	0.22159	0.30703	0.15974
647122.75	4185559.9	647122.75_4185559.9	0.05023	0.4045	0.27042	0.04505	0.0833	0.22382	0.31321	0.16135
647142.75	4185559.9	647142.75_4185559.9	0.05051	0.41961	0.27473	0.04555	0.08396	0.22593	0.31961	0.16296
647162.75	4185559.9	647162.75_4185559.9	0.05079	0.43714	0.27912	0.04604	0.08464	0.22799	0.32629	0.16456
647182.75	4185559.9	647182.75_4185559.9	0.05105	0.45673	0.28356	0.04652	0.08528	0.22984	0.33311	0.16615
647202.75	4185559.9	647202.75_4185559.9	0.05131	0.47722	0.28807	0.04698	0.08591	0.23158	0.34013	0.16771
647222.75	4185559.9	647222.75_4185559.9	0.05156	0.49795	0.29265	0.04744	0.0865	0.23319	0.34735	0.16925
647242.75	4185559.9	647242.75_4185559.9	0.0518	0.52056	0.29735	0.04788	0.08711	0.23474	0.35487	0.17082
647262.75	4185559.9	647262.75_4185559.9	0.05207	0.54623	0.30217	0.04832	0.08772	0.23623	0.3627	0.17237
647282.75	4185559.9	647282.75_4185559.9	0.05226	0.57323	0.30687	0.04871	0.08822	0.23737	0.37043	0.17385
647302.75	4185559.9	647302.75_4185559.9	0.0523	0.60309	0.31166	0.0491	0.08854	0.23826	0.38022	0.17532
647322.75	4185559.9	647322.75_4185559.9	0.05215	0.6323	0.31587	0.04946	0.08887	0.2382	0.38876	0.17686
647022.75	4185579.9	647022.75_4185579.9	0.04921	0.35869	0.24845	0.04252	0.08076	0.21478	0.28604	0.15226
647042.75	4185579.9	647042.75_4185579.9	0.04947	0.3696	0.25225	0.043	0.08141	0.2178	0.29146	0.15379
647062.75	4185579.9	647062.75_4185579.9	0.04975	0.38131	0.25615	0.04348	0.08212	0.22071	0.29715	0.15534
647082.75	4185579.9	647082.75_4185579.9	0.05004	0.39399	0.26016	0.04399	0.08284	0.2236	0.30312	0.15693
647102.75	4185579.9	647102.75_4185579.9	0.05031	0.40736	0.26416	0.04447	0.08349	0.22625	0.30913	0.15844
647122.75	4185579.9	647122.75_4185579.9	0.05057	0.42204	0.26823	0.04495	0.08417	0.22873	0.31534	0.15995
647142.75	4185579.9	647142.75_4185579.9	0.05084	0.43821	0.27239	0.04542	0.08483	0.23112	0.32175	0.16148
647162.75	4185579.9	647162.75_4185579.9	0.05113	0.45705	0.27668	0.04591	0.08555	0.23355	0.32846	0.16303
647182.75	4185579.9	647182.75_4185579.9	0.05141	0.4785	0.28102	0.04637	0.08623	0.23575	0.33529	0.16455
647202.75	4185579.9	647202.75_4185579.9	0.05164	0.50121	0.28533	0.04681	0.08687	0.23768	0.3422	0.16602
647222.75	4185579.9	647222.75_4185579.9	0.05186	0.52425	0.28973	0.04724	0.08748	0.23945	0.34928	0.16746
647242.75	4185579.9	647242.75_4185579.9	0.05211	0.54859	0.29419	0.04765	0.08804	0.24112	0.35664	0.16893
647262.75	4185579.9	647262.75_4185579.9	0.05243	0.57802	0.29897	0.04808	0.08875	0.24301	0.36463	0.17045
647282.75	4185579.9	647282.75_4185579.9	0.05265	0.61008	0.30369	0.04848	0.08934	0.24458	0.3726	0.17193
647302.75	4185579.9	647302.75_4185579.9	0.05228	0.63771	0.30747	0.04881	0.08942	0.24478	0.38216	0.17319
647022.75	4185599.9	647022.75_4185599.9	0.04944	0.37168	0.24662	0.04244	0.08151	0.21735	0.28708	0.15109
647042.75	4185599.9	647042.75_4185599.9	0.04979	0.38395	0.25042	0.04293	0.08226	0.22093	0.29275	0.15263
647062.75	4185599.9	647062.75_4185599.9	0.05009	0.39682	0.25423	0.04341	0.08296	0.22421	0.29843	0.15411
647082.75	4185599.9	647082.75_4185599.9	0.05039	0.41069	0.25812	0.0439	0.08371	0.22754	0.30433	0.15563
647102.75	4185599.9	647102.75_4185599.9	0.05067	0.42526	0.26204	0.04438	0.08441	0.23061	0.31031	0.1571
647122.75	4185599.9	647122.75_4185599.9	0.05092	0.44083	0.26594	0.04483	0.08506	0.23339	0.31638	0.15852
647142.75	4185599.9	647142.75_4185599.9	0.05116	0.45801	0.26993	0.04529	0.08573	0.23611	0.32266	0.15995
647162.75	4185599.9	647162.75_4185599.9	0.05148	0.47836	0.27412	0.04576	0.08647	0.23891	0.32941	0.16144
647182.75	4185599.9	647182.75_4185599.9	0.05177	0.50171	0.27837	0.04621	0.08719	0.2415	0.3363	0.1629
647202.75	4185599.9	647202.75_4185599.9	0.05198	0.52679	0.28252	0.04662	0.08782	0.2437	0.3431	0.16429
647222.75	4185599.9	647222.75_4185599.9	0.05227	0.55353	0.28679	0.04704	0.08847	0.24583	0.35017	0.16568
647242.75	4185599.9	647242.75_4185599.9	0.05245	0.58093	0.29108	0.04743	0.08897	0.24841	0.35742	0.16706
647262.75	4185599.9	647262.75_4185599.9	0.05276	0.61374	0.29572	0.04783	0.08976	0.25002	0.36535	0.16852
647282.75	4185599.9	647282.75_4185599.9	0.05262	0.6456	0.29998	0.04818	0.08998	0.25162	0.37442	0.16984
647022.75	4185619.9	647022.75_4185619.9	0.04973	0.38489	0.24471	0.04236	0.08231	0.21954	0.28737	0.14989
647042.75	4185619.9	647042.75_4185619.9	0.05002	0.39758	0.24834	0.04283	0.08303	0.22327	0.2928	0.15132
647062.75	4185619.9	647062.75_4185619.9	0.0503	0.41125	0.25201	0.0433	0.08373	0.22695	0.29834	0.15273
647082.75	4185619.9	647082.75_4185619.9	0.05058	0.42627	0.25576	0.04377	0.08446	0.23064	0.30414	0.15416
647102.75	4185619.9	647102.75_4185619.9	0.05095	0.44284	0.25967	0.04425	0.08523	0.23429	0.31029	0.15562
647122.75	4185619.9	647122.75_4185619.9	0.05126	0.46023	0.26356	0.04471	0.08597	0.23773	0.31649	0.15703
647142.75	4185619.9	647142.75_4185619.9	0.05148	0.47843	0.26739	0.04515	0.08665	0.24079	0.32264	0.15838
647162.75	4185619.9	647162.75_4185619.9	0.05179	0.50004	0.27145	0.04559	0.0874	0.24394	0.32925	0.15979
647182.75	4185619.9	647182.75_4185619.9	0.05213	0.52519	0.27559	0.04603	0.08815	0.24702	0.3361	0.1612
647202.75	4185619.9	647202.75_4185619.9	0.05236	0.55327	0.27969	0.04644	0.08884	0.24972	0.34291	0.16255
647222.75	4185619.9	647222.75_4185619.9	0.05262	0.58421	0.28387	0.04683	0.08951	0.25225	0.34998	0.1639

647242.75	4185619.9	647242.75_4185619.9	0.05284	0.61532	0.28803	0.0472	0.09003	0.2553	0.3571	0.16522
647262.75	4185619.9	647262.75_4185619.9	0.05265	0.64641	0.2921	0.04754	0.09028	0.257	0.36607	0.16649
647102.75	4185639.9	647102.75_4185639.9	0.05112	0.45808	0.25697	0.04409	0.08573	0.23801	0.31002	0.154
647122.75	4185639.9	647122.75_4185639.9	0.05146	0.47689	0.26076	0.04454	0.08653	0.24204	0.31522	0.15536
647142.75	4185639.9	647142.75_4185639.9	0.05178	0.49769	0.26466	0.04498	0.08743	0.24582	0.32143	0.15672
647162.75	4185639.9	647162.75_4185639.9	0.05214	0.52156	0.26871	0.04542	0.08833	0.24863	0.32813	0.15811
647182.75	4185639.9	647182.75_4185639.9	0.05247	0.54837	0.27275	0.04584	0.08914	0.25224	0.33491	0.15947
647202.75	4185639.9	647202.75_4185639.9	0.05274	0.57874	0.27678	0.04624	0.08986	0.25544	0.34164	0.16079
647222.75	4185639.9	647222.75_4185639.9	0.05303	0.6124	0.2808	0.0466	0.09056	0.2583	0.34842	0.16208
647242.75	4185639.9	647242.75_4185639.9	0.05286	0.64417	0.28459	0.04693	0.0906	0.26165	0.35607	0.16325
647162.75	4185659.9	647162.75_4185659.9	0.05207	0.53815	0.26545	0.04519	0.0887	0.25343	0.32627	0.15625
647182.75	4185659.9	647182.75_4185659.9	0.05237	0.56515	0.26933	0.04558	0.08943	0.25738	0.3327	0.15754
647202.75	4185659.9	647202.75_4185659.9	0.0526	0.59533	0.27321	0.04596	0.09012	0.2611	0.33913	0.15879
648341.36	4184509.59	648341.36_4184509.59	0.04462	0.49768	1.41666	0.12143	0.07888	0.1601	0.34202	0.67199
648321.36	4184529.59	648321.36_4184529.59	0.04483	0.49509	1.40443	0.11879	0.07964	0.16177	0.34298	0.64537
648341.36	4184529.59	648341.36_4184529.59	0.04495	0.50994	1.47869	0.11903	0.07972	0.16285	0.3504	0.66702
648361.36	4184529.59	648361.36_4184529.59	0.04505	0.52559	1.55913	0.11896	0.0798	0.16388	0.35801	0.68984
648281.36	4184549.59	648281.36_4184549.59	0.04494	0.47814	1.31571	0.11573	0.08042	0.1625	0.33766	0.60203
648301.36	4184549.59	648301.36_4184549.59	0.04498	0.49172	1.38941	0.11615	0.08039	0.16326	0.34365	0.62134
648321.36	4184549.59	648321.36_4184549.59	0.04514	0.5067	1.46294	0.11647	0.08047	0.16448	0.3512	0.64245
648341.36	4184549.59	648341.36_4184549.59	0.04528	0.52251	1.54296	0.11652	0.08057	0.16567	0.35912	0.66481
648361.36	4184549.59	648361.36_4184549.59	0.04539	0.53912	1.6303	0.11626	0.08067	0.16676	0.36709	0.68822
648281.36	4184569.59	648281.36_4184569.59	0.04526	0.48736	1.34671	0.11369	0.08135	0.1654	0.34581	0.5987
648301.36	4184569.59	648301.36_4184569.59	0.04532	0.50319	1.44467	0.11399	0.08126	0.16609	0.35236	0.6206
648321.36	4184569.59	648321.36_4184569.59	0.04545	0.51845	1.52324	0.11405	0.08132	0.16725	0.35981	0.64185
648341.36	4184569.59	648341.36_4184569.59	0.04561	0.53537	1.60961	0.11391	0.08144	0.16855	0.36816	0.66479
648361.36	4184569.59	648361.36_4184569.59	0.04572	0.55291	1.70408	0.11348	0.08154	0.16968	0.37647	0.68864
648381.36	4184569.59	648381.36_4184569.59	0.04566	0.57006	1.79878	0.11272	0.08092	0.16972	0.38407	0.71261
648281.36	4184589.59	648281.36_4184589.59	0.04556	0.49731	1.38911	0.11158	0.08219	0.16819	0.35413	0.59831
648301.36	4184589.59	648301.36_4184589.59	0.04569	0.51517	1.50073	0.1118	0.08219	0.16911	0.36173	0.6218
648321.36	4184589.59	648321.36_4184589.59	0.04577	0.5307	1.58571	0.11156	0.08219	0.17014	0.36892	0.64295
648341.36	4184589.59	648341.36_4184589.59	0.04594	0.54866	1.67877	0.11126	0.08232	0.17151	0.37761	0.66619
648361.36	4184589.59	648361.36_4184589.59	0.04606	0.56743	1.78108	0.1107	0.08243	0.17271	0.38632	0.69036
648381.36	4184589.59	648381.36_4184589.59	0.04616	0.58763	1.89371	0.10995	0.08253	0.17381	0.3952	0.71564
648281.36	4184609.59	648281.36_4184609.59	0.04588	0.50803	1.43853	0.1094	0.08306	0.17107	0.36314	0.59967
648301.36	4184609.59	648301.36_4184609.59	0.04607	0.52677	1.5508	0.10947	0.08315	0.17227	0.37153	0.62344
648321.36	4184609.59	648321.36_4184609.59	0.04611	0.54358	1.65054	0.10903	0.0831	0.17315	0.37857	0.64489
648341.36	4184609.59	648341.36_4184609.59	0.04628	0.56261	1.75072	0.10858	0.08323	0.17455	0.38753	0.66811
648361.36	4184609.59	648361.36_4184609.59	0.04641	0.58293	1.86143	0.10793	0.08334	0.17583	0.39668	0.69239
648381.36	4184609.59	648381.36_4184609.59	0.04652	0.60503	1.9846	0.10716	0.08346	0.17703	0.4061	0.71777
648281.36	4184629.59	648281.36_4184629.59	0.04622	0.51946	1.49134	0.10715	0.08395	0.17405	0.37262	0.60161
648301.36	4184629.59	648301.36_4184629.59	0.04642	0.53861	1.60085	0.10701	0.08409	0.17539	0.38141	0.62455
648321.36	4184629.59	648321.36_4184629.59	0.04645	0.55719	1.71768	0.10646	0.08401	0.17623	0.38874	0.64671
648341.36	4184629.59	648341.36_4184629.59	0.04661	0.57748	1.8257	0.10589	0.08414	0.17765	0.39782	0.66973
648361.36	4184629.59	648361.36_4184629.59	0.04675	0.59953	1.9457	0.1052	0.08425	0.179	0.40738	0.69379
648381.36	4184629.59	648381.36_4184629.59	0.04686	0.62351	2.07976	0.1044	0.08437	0.18023	0.41716	0.71884
648401.36	4184629.59	648401.36_4184629.59	0.04669	0.64625	2.19644	0.10344	0.0836	0.18	0.42308	0.74302
648281.36	4184649.59	648281.36_4184649.59	0.04655	0.53172	1.54567	0.10484	0.08487	0.17711	0.3826	0.60326
648301.36	4184649.59	648301.36_4184649.59	0.04675	0.55256	1.67119	0.10457	0.08496	0.17844	0.39172	0.62672
648321.36	4184649.59	648321.36_4184649.59	0.04679	0.5718	1.78724	0.10389	0.08493	0.17939	0.39926	0.64787
648341.36	4184649.59	648341.36_4184649.59	0.04696	0.59378	1.90368	0.10326	0.08509	0.18087	0.40877	0.67056
648361.36	4184649.59	648361.36_4184649.59	0.04709	0.61755	2.03372	0.10252	0.08518	0.18224	0.41855	0.69411
648381.36	4184649.59	648381.36_4184649.59	0.04721	0.64384	2.17966	0.10175	0.08531	0.18353	0.42875	0.71866
648401.36	4184649.59	648401.36_4184649.59	0.04721	0.67263	2.34122	0.10097	0.08545	0.18465	0.43906	0.74398
648281.36	4184669.59	648281.36_4184669.59	0.04689	0.54498	1.60155	0.10248	0.08579	0.18027	0.393	0.60422
648301.36	4184669.59	648301.36_4184669.59	0.04707	0.56743	1.74338	0.10212	0.08584	0.18152	0.40236	0.62758
648321.36	4184669.59	648321.36_4184669.59	0.04714	0.58779	1.85908	0.10135	0.08588	0.18267	0.41051	0.64806
648341.36	4184669.59	648341.36_4184669.59	0.04732	0.61158	1.98426	0.10069	0.08605	0.18422	0.42041	0.67028
648361.36	4184669.59	648361.36_4184669.59	0.04745	0.6373	2.12512	0.09995	0.08613	0.18562	0.43044	0.69318
648381.36	4184669.59	648381.36_4184669.59	0.04757	0.66623	2.28396	0.09923	0.08628	0.18699	0.44117	0.71714
648401.36	4184669.59	648401.36_4184669.59	0.04768	0.69886	2.46455	0.09856	0.08647	0.18826	0.45237	0.74207
648281.36	4184689.59	648281.36_4184689.59	0.04725	0.55923	1.65991	0.10011	0.08674	0.18353	0.40399	0.60434
648301.36	4184689.59	648301.36_4184689.59	0.04738	0.5828	1.81164	0.09962	0.08676	0.1847	0.41343	0.62685
648321.36	4184689.59	648321.36_4184689.59	0.04751	0.60495	1.9324	0.09887	0.08684	0.18607	0.42237	0.64705
648341.36	4184689.59	648341.36_4184689.59	0.04768	0.63048	2.06674	0.09821	0.08703	0.18766	0.43252	0.6686
648361.36	4184689.59	648361.36_4184689.59	0.04781	0.65857	2.21875	0.0975	0.08713	0.18915	0.44308	0.69088
648381.36	4184689.59	648381.36_4184689.59	0.04794	0.69023	2.39121	0.09685	0.08728	0.19057	0.45429	0.71408
648401.36	4184689.59	648401.36_4184689.59	0.04807	0.72641	2.58848	0.09626	0.0875	0.19194	0.46625	0.73825
648281.36	4184709.59	648281.36_4184709.59	0.04761	0.57424	1.72187	0.09776	0.08771	0.1869	0.41563	0.60362
648301.36	4184709.59	648301.36_4184709.59	0.04771	0.59846	1.8775	0.09716	0.08771	0.18801	0.42509	0.62492
648321.36	4184709.59	648321.36_4184709.59	0.04787	0.6226	2.00576	0.09647	0.08783	0.18957	0.43487	0.64474
648341.36	4184709.59	648341.36_4184709.59	0.04804	0.64994	2.14964	0.09581	0.08802	0.19121	0.4454	0.66552
648361.36	4184709.59	648361.36_4184709.59	0.04816	0.67985	2.3141	0.09512	0.0881	0.19265	0.456	0.68679
648381.36	4184709.59	648381.36_4184709.59	0.04829	0.71411	2.50116	0.09453	0.08824	0.19411	0.46757	0.70902
648401.36	4184709.59	648401.36_4184709.59	0.04842	0.75388	2.71589	0.09404	0.08848	0.19556	0.48012	0.73226
648421.36	4184709.59	648421.36_4184709.59	0.04829	0.79257	2.93977	0.09344	0.08775	0.1954	0.48775	0.75409
648281.36	4184729.59	648281.36_4184729.59	0.04797	0.58918	1.78402	0.09544	0.08869	0.19035	0.42789	0.60179
648301.36	4184729.59	648301.36_4184729.59	0.04806	0.61409	1.9414	0.0948	0.08871	0.19149	0.43761	0.62187
648321.36	4184729.59	648321.36_4184729.59	0.04824	0.63997	2.07767	0.09414	0.08883	0.19317	0.44798	0.6411
648341.36	4184729.59	648341.36_4184729.59	0.04841	0.66912	2.23123	0.09352	0.08901	0.19486	0.45891	0.66108
648361.36	4184729.59	648361.36_4184729.59	0.04852	0.70124	2.40767	0.09289	0.08911	0.19633	0.46983	0.68141
648381.36	4184729.59	648381.36_4184729.59	0.04864	0.73776	2.60907	0.09235	0.08923	0.19777	0.48161	0.70248
648401.36	4184729.59	648401.36_4184729.59	0.04876	0.78061	2.84219	0.09191	0.08947	0.19922	0.49451	0.72449
648421.36	4184729.59	648421.36_4184729.59	0.04874	0.82784	3.1041	0.09148	0.08939	0.19997	0.50704	0.74644
648281.36	4184749.59	648281.36_4184749.59	0.04834	0.60411	1.85065	0.0932	0.08966	0.19385	0.4407	0.59924
648301.36	4184749.59	648301.36_4184749.59	0.04843	0.62934	2.00259	0.09253	0.08973	0.19512	0.4508	0.61776

648321.36	4184749.59	648321.36_4184749.59	0.04861	0.65671	2.14668	0.09191	0.08986	0.19687	0.46185	0.63625
648341.36	4184749.59	648341.36_4184749.59	0.04877	0.68755	2.3099	0.09134	0.09003	0.19861	0.47315	0.65534
648361.36	4184749.59	648361.36_4184749.59	0.04888	0.72147	2.49766	0.09076	0.09012	0.20007	0.48432	0.67458
648381.36	4184749.59	648381.36_4184749.59	0.049	0.76071	2.71287	0.0903	0.09025	0.20159	0.49655	0.69464
648401.36	4184749.59	648401.36_4184749.59	0.04912	0.80644	2.96322	0.08991	0.09048	0.20305	0.5098	0.71535
648421.36	4184749.59	648421.36_4184749.59	0.04913	0.85937	3.25204	0.08958	0.09059	0.20433	0.5236	0.73644
648281.36	4184769.59	648281.36_4184769.59	0.04866	0.61892	1.92403	0.09104	0.09055	0.19725	0.45353	0.59575
648301.36	4184769.59	648301.36_4184769.59	0.04883	0.6445	2.05955	0.0904	0.0908	0.19897	0.46501	0.61274
648321.36	4184769.59	648321.36_4184769.59	0.04899	0.6732	2.21156	0.08981	0.09093	0.20074	0.47651	0.63029
648341.36	4184769.59	648341.36_4184769.59	0.04915	0.70567	2.38441	0.08928	0.09107	0.20248	0.48823	0.64839
648361.36	4184769.59	648361.36_4184769.59	0.04927	0.74232	2.58314	0.08879	0.0912	0.20409	0.50023	0.66684
648381.36	4184769.59	648381.36_4184769.59	0.0494	0.78461	2.8123	0.0884	0.09134	0.20568	0.5132	0.68586
648401.36	4184769.59	648401.36_4184769.59	0.04952	0.83383	3.07967	0.08807	0.09157	0.20718	0.52694	0.70539
648421.36	4184769.59	648421.36_4184769.59	0.04961	0.89068	3.39202	0.08777	0.09178	0.20846	0.54114	0.72509
648281.36	4184789.59	648281.36_4184789.59	0.04901	0.6328	1.97375	0.08889	0.09155	0.20094	0.46709	0.59016
648301.36	4184789.59	648301.36_4184789.59	0.04919	0.65971	2.11463	0.08829	0.09181	0.20276	0.47941	0.60638
648321.36	4184789.59	648321.36_4184789.59	0.04935	0.68997	2.27375	0.08776	0.09198	0.20459	0.49167	0.62306
648341.36	4184789.59	648341.36_4184789.59	0.04951	0.72419	2.45498	0.08729	0.0921	0.20638	0.50388	0.64016
648361.36	4184789.59	648361.36_4184789.59	0.04964	0.76325	2.66305	0.08688	0.09226	0.2081	0.51655	0.65764
648381.36	4184789.59	648381.36_4184789.59	0.04978	0.80832	2.90425	0.08655	0.09242	0.20976	0.5301	0.67558
648401.36	4184789.59	648401.36_4184789.59	0.0499	0.86069	3.18609	0.08627	0.09263	0.21129	0.5444	0.69386
648421.36	4184789.59	648421.36_4184789.59	0.04988	0.91951	3.50686	0.08597	0.0926	0.21213	0.55855	0.712
648281.36	4184809.59	648281.36_4184809.59	0.04937	0.64766	2.01916	0.08683	0.09259	0.20476	0.48137	0.58365
648301.36	4184809.59	648301.36_4184809.59	0.04955	0.67588	2.16532	0.08629	0.09283	0.20665	0.49448	0.59903
648321.36	4184809.59	648321.36_4184809.59	0.04971	0.70758	2.33048	0.08581	0.09302	0.20852	0.50739	0.61475
648341.36	4184809.59	648341.36_4184809.59	0.04986	0.74323	2.51831	0.08539	0.09315	0.21035	0.5202	0.63077
648361.36	4184809.59	648361.36_4184809.59	0.04999	0.7837	2.73353	0.08503	0.09329	0.21209	0.53329	0.64713
648381.36	4184809.59	648381.36_4184809.59	0.05012	0.83047	2.98291	0.08474	0.09345	0.21377	0.54715	0.66386
648401.36	4184809.59	648401.36_4184809.59	0.05014	0.88422	3.2695	0.08449	0.09354	0.21529	0.56169	0.68082
648715.48	4183765.64	648715.48_4183765.64	0.03629	0.52248	0.52277	0.27106	0.05916	0.10323	0.1888	0.52434
648735.48	4183765.64	648735.48_4183765.64	0.03636	0.54819	0.53289	0.28006	0.05942	0.10366	0.19006	0.53174
648755.48	4183765.64	648755.48_4183765.64	0.03637	0.57682	0.54303	0.28979	0.05964	0.10404	0.19037	0.53966
648675.48	4183785.64	648675.48_4183785.64	0.0364	0.48295	0.52092	0.25221	0.05909	0.10359	0.19012	0.53609
648695.48	4183785.64	648695.48_4183785.64	0.03643	0.50333	0.53066	0.2598	0.05938	0.10394	0.19115	0.54231
648715.48	4183785.64	648715.48_4183785.64	0.03651	0.5271	0.54132	0.26833	0.05971	0.10444	0.19246	0.54965
648735.48	4183785.64	648735.48_4183785.64	0.03657	0.55323	0.55184	0.27748	0.05996	0.10489	0.19373	0.55716
648755.48	4183785.64	648755.48_4183785.64	0.03659	0.58266	0.56249	0.2873	0.06019	0.10527	0.19405	0.56521
648635.48	4183805.64	648635.48_4183805.64	0.03651	0.44934	0.51863	0.23537	0.059	0.10393	0.19129	0.54774
648655.48	4183805.64	648655.48_4183805.64	0.03654	0.4668	0.52859	0.24202	0.05929	0.10436	0.19239	0.55473
648675.48	4183805.64	648675.48_4183805.64	0.0366	0.48611	0.53899	0.24935	0.05959	0.10479	0.1936	0.56183
648695.48	4183805.64	648695.48_4183805.64	0.03665	0.50788	0.54992	0.2574	0.05993	0.10523	0.1949	0.56932
648715.48	4183805.64	648715.48_4183805.64	0.03673	0.53192	0.56088	0.26604	0.06026	0.1057	0.1962	0.57689
648735.48	4183805.64	648735.48_4183805.64	0.0368	0.55917	0.5722	0.27534	0.06059	0.10617	0.19755	0.58503
648755.48	4183805.64	648755.48_4183805.64	0.03688	0.59002	0.58377	0.28519	0.06085	0.10658	0.19894	0.59377
648775.48	4183805.64	648775.48_4183805.64	0.03682	0.62268	0.59374	0.29509	0.06103	0.10673	0.19879	0.6018
648795.48	4183805.64	648795.48_4183805.64	0.03682	0.65878	0.60399	0.30514	0.06126	0.10682	0.19958	0.60648
648635.48	4183825.64	648635.48_4183825.64	0.03671	0.45243	0.5371	0.23261	0.05951	0.10517	0.19482	0.57299
648655.48	4183825.64	648655.48_4183825.64	0.03676	0.47053	0.54783	0.23962	0.05984	0.10565	0.19609	0.5815
648675.48	4183825.64	648675.48_4183825.64	0.03683	0.49032	0.5588	0.24717	0.06015	0.10608	0.19736	0.58968
648695.48	4183825.64	648695.48_4183825.64	0.03688	0.51267	0.5703	0.25538	0.06048	0.10652	0.19872	0.59804
648715.48	4183825.64	648715.48_4183825.64	0.03695	0.53774	0.58207	0.26415	0.06082	0.10693	0.20012	0.60655
648735.48	4183825.64	648735.48_4183825.64	0.03704	0.56627	0.59438	0.27348	0.06116	0.10734	0.2016	0.61565
648755.48	4183825.64	648755.48_4183825.64	0.0371	0.5968	0.60599	0.2829	0.06145	0.10787	0.20289	0.6243
648775.48	4183825.64	648775.48_4183825.64	0.03701	0.62915	0.61615	0.29224	0.06157	0.10792	0.20263	0.63223
648795.48	4183825.64	648795.48_4183825.64	0.03695	0.66172	0.61781	0.30137	0.06174	0.10793	0.20306	0.62977
648815.48	4183825.64	648815.48_4183825.64	0.03701	0.69815	0.61857	0.31055	0.06196	0.10798	0.20377	0.63494
648635.48	4183845.64	648635.48_4183845.64	0.03695	0.45637	0.55731	0.23054	0.06008	0.10653	0.19865	0.59919
648655.48	4183845.64	648655.48_4183845.64	0.03699	0.47466	0.56845	0.23767	0.06039	0.10697	0.19991	0.60916
648675.48	4183845.64	648675.48_4183845.64	0.03706	0.49515	0.5801	0.24541	0.06071	0.10741	0.20128	0.6189
648695.48	4183845.64	648695.48_4183845.64	0.03713	0.51844	0.59244	0.25374	0.06107	0.10787	0.20277	0.62876
648715.48	4183845.64	648715.48_4183845.64	0.03721	0.54425	0.6049	0.26244	0.06141	0.10829	0.20423	0.6384
648735.48	4183845.64	648735.48_4183845.64	0.03727	0.57285	0.61755	0.27143	0.06174	0.10867	0.20567	0.64809
648755.48	4183845.64	648755.48_4183845.64	0.03732	0.60317	0.62953	0.28033	0.06194	0.10915	0.20693	0.65714
648775.48	4183845.64	648775.48_4183845.64	0.03732	0.63734	0.64244	0.2893	0.06221	0.10948	0.2071	0.66717
648795.48	4183845.64	648795.48_4183845.64	0.0372	0.67008	0.64893	0.2975	0.06237	0.10934	0.20749	0.66899
648815.48	4183845.64	648815.48_4183845.64	0.03722	0.70023	0.64022	0.30549	0.0625	0.1092	0.20762	0.66682
648655.48	4183865.64	648655.48_4183865.64	0.03724	0.47938	0.59063	0.23611	0.06096	0.10834	0.20389	0.63729
648675.48	4183865.64	648675.48_4183865.64	0.03731	0.50072	0.60312	0.24394	0.0613	0.1088	0.20538	0.64917
648695.48	4183865.64	648695.48_4183865.64	0.03735	0.52376	0.61547	0.25201	0.06162	0.10919	0.20674	0.66009
648715.48	4183865.64	648715.48_4183865.64	0.03737	0.54855	0.6273	0.26021	0.06181	0.10962	0.20799	0.67
648735.48	4183865.64	648735.48_4183865.64	0.03747	0.57797	0.6413	0.2689	0.0623	0.11011	0.20963	0.68163
648755.48	4183865.64	648755.48_4183865.64	0.03755	0.60964	0.65523	0.27745	0.06264	0.11053	0.2112	0.69302
648775.48	4183865.64	648775.48_4183865.64	0.03745	0.64102	0.66662	0.28531	0.06273	0.11056	0.21097	0.70229
648795.48	4183865.64	648795.48_4183865.64	0.03755	0.6773	0.68082	0.29303	0.06304	0.11082	0.21229	0.71389
648815.48	4183865.64	648815.48_4183865.64	0.03744	0.70336	0.66674	0.29975	0.06309	0.11055	0.21194	0.70479
648835.48	4183865.64	648835.48_4183865.64	0.03753	0.74208	0.6798	0.30577	0.06337	0.1107	0.21315	0.71462
648655.48	4183885.64	648655.48_4183885.64	0.03746	0.48425	0.61411	0.23465	0.06152	0.10969	0.2079	0.6649
648675.48	4183885.64	648675.48_4183885.64	0.03751	0.50577	0.62706	0.24233	0.06185	0.11013	0.20937	0.67891
648695.48	4183885.64	648695.48_4183885.64	0.03757	0.52948	0.64029	0.25024	0.06219	0.11054	0.21087	0.69228
648715.48	4183885.64	648715.48_4183885.64	0.03751	0.5538	0.65215	0.25793	0.06231	0.11093	0.21111	0.7035
648735.48	4183885.64	648735.48_4183885.64	0.03753	0.5816	0.66518	0.26583	0.06263	0.11125	0.21227	0.71562
648755.48	4183885.64	648755.48_4183885.64	0.03768	0.61345	0.68137	0.27379	0.06303	0.1118	0.21415	0.72958
648775.48	4183885.64	648775.48_4183885.64	0.03772	0.64609	0.6954	0.28109	0.06336	0.11215	0.21551	0.74226
648795.48	4183885.64	648795.48_4183885.64	0.03774	0.67931	0.70957	0.28752	0.06362	0.11217	0.2166	0.75392
648815.48	4183885.64	648815.48_4183885.64	0.03769	0.70863	0.70528	0.2931	0.06377	0.11208	0.21693	0.75093
648835.48	4183885.64	648835.48_4183885.64	0.03774	0.73894	0.70761	0.2976	0.06394	0.11203	0.21739	0.75479

648655.48	4183905.64	648655.48_4183905.64	0.03767	0.48921	0.63898	0.23318	0.06207	0.11103	0.21195	0.69135
648675.48	4183905.64	648675.48_4183905.64	0.03773	0.51114	0.65275	0.24066	0.06241	0.11148	0.2135	0.70823
648695.48	4183905.64	648695.48_4183905.64	0.03768	0.53381	0.6654	0.24797	0.06258	0.11185	0.21476	0.72307
648715.48	4183905.64	648715.48_4183905.64	0.03754	0.55658	0.67255	0.25501	0.06273	0.11199	0.21422	0.73439
648735.48	4183905.64	648735.48_4183905.64	0.03763	0.58461	0.69109	0.26238	0.0631	0.11242	0.21593	0.7492
648755.48	4183905.64	648755.48_4183905.64	0.03775	0.61515	0.70736	0.26944	0.06351	0.11286	0.21782	0.76604
648775.48	4183905.64	648775.48_4183905.64	0.03794	0.64869	0.72543	0.27604	0.06394	0.11342	0.21994	0.78367
648795.48	4183905.64	648795.48_4183905.64	0.03795	0.67996	0.74044	0.28131	0.06421	0.11354	0.22105	0.79595
648815.48	4183905.64	648815.48_4183905.64	0.03795	0.71132	0.74497	0.28551	0.06444	0.11363	0.22202	0.80054
648835.48	4183905.64	648835.48_4183905.64	0.03797	0.73683	0.73966	0.28865	0.06455	0.11346	0.22201	0.80133
648655.48	4183925.64	648655.48_4183925.64	0.03784	0.49404	0.66507	0.23154	0.06261	0.11237	0.21601	0.71611
648675.48	4183925.64	648675.48_4183925.64	0.03781	0.51505	0.67835	0.23848	0.06275	0.1127	0.21668	0.73468
648695.48	4183925.64	648695.48_4183925.64	0.03768	0.53667	0.68996	0.24522	0.06298	0.11293	0.21705	0.75108
648715.48	4183925.64	648715.48_4183925.64	0.0377	0.5616	0.70121	0.2521	0.06331	0.11335	0.21855	0.7681
648735.48	4183925.64	648735.48_4183925.64	0.03788	0.59019	0.72243	0.25884	0.06375	0.11388	0.22074	0.78944
648755.48	4183925.64	648755.48_4183925.64	0.03804	0.61968	0.74003	0.26498	0.06416	0.11434	0.22274	0.80861
648775.48	4183925.64	648775.48_4183925.64	0.03814	0.64941	0.75716	0.27024	0.06451	0.11469	0.22437	0.82625
648795.48	4183925.64	648795.48_4183925.64	0.03817	0.67933	0.77394	0.2744	0.0648	0.11493	0.22569	0.84178
648815.48	4183925.64	648815.48_4183925.64	0.03823	0.71113	0.78848	0.27739	0.06509	0.11516	0.22697	0.85517
648835.48	4183925.64	648835.48_4183925.64	0.0382	0.7329	0.77335	0.27902	0.06516	0.11489	0.22668	0.85081
648675.48	4183945.64	648675.48_4183945.64	0.03787	0.51916	0.70534	0.23609	0.06325	0.11393	0.22016	0.75965
648695.48	4183945.64	648695.48_4183945.64	0.03783	0.54139	0.71589	0.24249	0.06354	0.11429	0.22129	0.77716
648715.48	4183945.64	648715.48_4183945.64	0.03793	0.56644	0.73198	0.24875	0.06391	0.11477	0.22311	0.79989
648735.48	4183945.64	648735.48_4183945.64	0.03811	0.59394	0.75514	0.25462	0.06435	0.1153	0.22535	0.82701
648755.48	4183945.64	648755.48_4183945.64	0.03821	0.62113	0.77289	0.25967	0.06473	0.1157	0.22714	0.84874
648775.48	4183945.64	648775.48_4183945.64	0.03829	0.64855	0.79073	0.26378	0.06506	0.11602	0.22875	0.86796
648795.48	4183945.64	648795.48_4183945.64	0.03839	0.67778	0.81022	0.26685	0.0654	0.11636	0.23041	0.8881
648815.48	4183945.64	648815.48_4183945.64	0.03838	0.70362	0.80685	0.26863	0.0656	0.11639	0.23112	0.89634
648835.48	4183945.64	648835.48_4183945.64	0.03843	0.72931	0.81074	0.2689	0.06578	0.11639	0.23158	0.90481
648855.48	4183945.64	648855.48_4183945.64	0.03854	0.76827	0.83585	0.26801	0.0661	0.11675	0.23332	0.92594
648675.48	4183965.64	648675.48_4183965.64	0.0379	0.52153	0.72395	0.23339	0.06368	0.11507	0.22333	0.77324
648695.48	4183965.64	648695.48_4183965.64	0.03802	0.54536	0.74291	0.2394	0.06409	0.11565	0.2255	0.80166
648715.48	4183965.64	648715.48_4183965.64	0.03814	0.57057	0.76496	0.2449	0.06451	0.1162	0.22778	0.83059
648735.48	4183965.64	648735.48_4183965.64	0.03825	0.59591	0.78412	0.24975	0.06492	0.11666	0.22977	0.85768
648755.48	4183965.64	648755.48_4183965.64	0.03835	0.62135	0.80229	0.25377	0.06529	0.11705	0.23167	0.8833
648775.48	4183965.64	648775.48_4183965.64	0.03842	0.64594	0.81451	0.25684	0.0656	0.11732	0.2331	0.9052
648795.48	4183965.64	648795.48_4183965.64	0.03846	0.66768	0.81101	0.25882	0.06581	0.11736	0.23374	0.91989
648815.48	4183965.64	648815.48_4183965.64	0.03856	0.69537	0.83042	0.25932	0.06612	0.11764	0.23525	0.94125
648835.48	4183965.64	648835.48_4183965.64	0.03867	0.72708	0.85324	0.25859	0.06643	0.11796	0.23683	0.96355
648855.48	4183965.64	648855.48_4183965.64	0.03878	0.76498	0.88035	0.257	0.06674	0.11835	0.23855	0.9881
648655.48	4183985.64	648655.48_4183985.64	0.03807	0.50566	0.73867	0.22494	0.06393	0.11604	0.22624	0.76636
648675.48	4183985.64	648675.48_4183985.64	0.03807	0.52407	0.73815	0.23057	0.06418	0.11631	0.22705	0.78788
648695.48	4183985.64	648695.48_4183985.64	0.03817	0.54664	0.75675	0.23594	0.06457	0.11684	0.22911	0.81807
648715.48	4183985.64	648715.48_4183985.64	0.03829	0.57077	0.77823	0.2407	0.06499	0.11739	0.23144	0.85065
648735.48	4183985.64	648735.48_4183985.64	0.03844	0.59695	0.81534	0.2445	0.06548	0.11802	0.23429	0.88744
648755.48	4183985.64	648755.48_4183985.64	0.03853	0.62006	0.82696	0.24755	0.06583	0.11837	0.23601	0.91616
648775.48	4183985.64	648775.48_4183985.64	0.03858	0.64012	0.82934	0.24955	0.06607	0.11848	0.23692	0.93759
648795.48	4183985.64	648795.48_4183985.64	0.0387	0.66618	0.85166	0.25022	0.06644	0.11888	0.23888	0.9681
648695.48	4184005.64	648695.48_4184005.64	0.03843	0.55248	0.8028	0.232	0.06526	0.11847	0.23455	0.84477
648715.48	4184005.64	648715.48_4184005.64	0.03851	0.57346	0.81284	0.23589	0.06559	0.11884	0.23626	0.87521
648735.48	4184005.64	648735.48_4184005.64	0.03861	0.59542	0.83191	0.23886	0.06598	0.11927	0.23831	0.90914
648755.48	4184005.64	648755.48_4184005.64	0.03871	0.61735	0.85138	0.24079	0.06635	0.11965	0.2403	0.94362
648775.48	4184005.64	648775.48_4184005.64	0.03883	0.6414	0.87623	0.2416	0.06676	0.12011	0.24256	0.98166
648735.48	4184025.64	648735.48_4184025.64	0.03886	0.5984	0.87822	0.23248	0.06667	0.12089	0.24395	0.94111
648755.48	4184025.64	648755.48_4184025.64	0.03896	0.61888	0.89752	0.23343	0.06703	0.12126	0.2459	0.97889
649209.27	4184319.61	649209.27_4184319.61	0.04514	3.95156	17.73278	0.13143	0.08235	0.17683	0.46756	81.50597
649229.27	4184319.61	649229.27_4184319.61	0.04514	3.07998	14.13754	0.13043	0.08275	0.17801	0.47247	95.65878
649249.27	4184319.61	649249.27_4184319.61	0.04515	2.53627	11.60462	0.12905	0.0832	0.17921	0.47724	106.91375
649269.27	4184319.61	649269.27_4184319.61	0.04516	2.16358	9.75112	0.12739	0.08369	0.18037	0.48168	116.58056
649289.27	4184319.61	649289.27_4184319.61	0.04518	1.89352	8.35846	0.12568	0.08422	0.18151	0.48582	126.13786
649309.27	4184319.61	649309.27_4184319.61	0.04519	1.68589	7.27228	0.12408	0.08475	0.18256	0.48926	134.8255
649329.27	4184319.61	649329.27_4184319.61	0.0452	1.52157	6.40976	0.12278	0.08528	0.1835	0.49204	143.30778
649209.27	4184339.61	649209.27_4184339.61	0.04545	3.51258	16.29231	0.12797	0.08327	0.18002	0.48324	44.8244
649229.27	4184339.61	649229.27_4184339.61	0.04546	2.8132	13.22823	0.12693	0.0837	0.18123	0.4883	49.77189
649249.27	4184339.61	649249.27_4184339.61	0.04548	2.35679	11.02247	0.12553	0.08418	0.18244	0.49321	54.53203
649269.27	4184339.61	649269.27_4184339.61	0.04548	2.03359	9.36924	0.12387	0.08468	0.18359	0.49761	58.70245
649289.27	4184339.61	649289.27_4184339.61	0.04551	1.79424	8.09902	0.12218	0.08522	0.18472	0.50167	62.59818
649309.27	4184339.61	649309.27_4184339.61	0.04551	1.60805	7.0963	0.12064	0.08576	0.18574	0.50502	65.75958
649329.27	4184339.61	649329.27_4184339.61	0.04552	1.45918	6.28963	0.11941	0.08631	0.18667	0.50774	68.46156
649349.27	4184339.61	649349.27_4184339.61	0.04554	1.33734	5.62884	0.11864	0.08686	0.18751	0.50987	70.81208
649369.27	4184339.61	649369.27_4184339.61	0.04556	1.23558	5.07953	0.11836	0.08741	0.18826	0.5114	72.70272
649209.27	4184359.61	649209.27_4184359.61	0.04576	3.09977	14.73721	0.12463	0.08421	0.18327	0.49966	30.23316
649229.27	4184359.61	649229.27_4184359.61	0.04579	2.55288	12.18373	0.12359	0.0847	0.18457	0.50511	32.83409
649249.27	4184359.61	649249.27_4184359.61	0.0458	2.17493	10.29793	0.12214	0.08518	0.18575	0.50992	35.13012
649269.27	4184359.61	649269.27_4184359.61	0.04582	1.90024	8.86065	0.12049	0.08571	0.18691	0.51438	37.31378
649289.27	4184359.61	649289.27_4184359.61	0.04584	1.69155	7.735	0.11884	0.08626	0.18802	0.51836	39.36329
649309.27	4184359.61	649309.27_4184359.61	0.04585	1.52719	6.83434	0.11736	0.08682	0.18903	0.52169	41.12066
649329.27	4184359.61	649329.27_4184359.61	0.04587	1.39422	6.09951	0.11623	0.08739	0.18996	0.52439	42.59717
649349.27	4184359.61	649349.27_4184359.61	0.04589	1.28438	5.49031	0.11554	0.08796	0.19081	0.52652	43.80021
649369.27	4184359.61	649369.27_4184359.61	0.0459	1.19149	4.97757	0.11531	0.0885	0.1915	0.52784	44.36768
649189.27	4184379.61	649189.27_4184379.61	0.04609	3.39763	16.12502	0.12219	0.08478	0.18544	0.51169	20.83257
649209.27	4184379.61	649209.27_4184379.61	0.04608	2.74006	13.23364	0.12142	0.08517	0.18661	0.51688	22.33828
649229.27	4184379.61	649229.27_4184379.61	0.04612	2.31058	11.12474	0.12035	0.0857	0.18795	0.5226	23.90231
649249.27	4184379.61	649249.27_4184379.61	0.04611	1.99893	9.53707	0.11883	0.08616	0.18905	0.52709	25.12566
649269.27	4184379.61	649269.27_4184379.61	0.04612	1.76757	8.30217	0.11719	0.0867	0.19019	0.53152	26.31505
649289.27	4184379.61	649289.27_4184379.61	0.04615	1.58902	7.32168	0.1156	0.08729	0.19132	0.53561	27.48117

649309.27	4184379.61	649309.27_4184379.61	0.04615	1.44466	6.52108	0.11415	0.08783	0.19226	0.53861	28.29308
649329.27	4184379.61	649329.27_4184379.61	0.04617	1.32722	5.86023	0.11309	0.08841	0.19318	0.54124	29.02767
649349.27	4184379.61	649349.27_4184379.61	0.04621	1.23001	5.30908	0.11252	0.08903	0.19407	0.54356	29.71478
649369.27	4184379.61	649369.27_4184379.61	0.04624	1.14661	4.8376	0.11237	0.08961	0.19478	0.545	29.93291
649169.27	4184399.61	649169.27_4184399.61	0.04639	3.70304	17.39381	0.11955	0.08534	0.18759	0.52388	15.34917
649189.27	4184399.61	649189.27_4184399.61	0.04639	2.92759	14.18422	0.11912	0.08571	0.1888	0.52948	16.47379
649209.27	4184399.61	649209.27_4184399.61	0.04641	2.43466	11.86342	0.11836	0.08618	0.19009	0.53524	17.46255
649229.27	4184399.61	649229.27_4184399.61	0.04644	2.09237	10.1321	0.1172	0.08669	0.19136	0.54072	18.38779
649249.27	4184399.61	649249.27_4184399.61	0.04643	1.83768	8.79613	0.11567	0.08719	0.19247	0.5453	19.15837
649269.27	4184399.61	649269.27_4184399.61	0.04644	1.64337	7.73815	0.11404	0.08773	0.19359	0.54964	19.84981
649289.27	4184399.61	649289.27_4184399.61	0.04648	1.4916	6.89015	0.11251	0.08835	0.19474	0.55386	20.53779
649309.27	4184399.61	649309.27_4184399.61	0.04648	1.36634	6.18511	0.11112	0.08891	0.19566	0.55679	20.93884
649329.27	4184399.61	649329.27_4184399.61	0.0465	1.26327	5.59624	0.11013	0.0895	0.19655	0.55933	21.2643
649349.27	4184399.61	649349.27_4184399.61	0.04655	1.17708	5.10022	0.10964	0.09013	0.19743	0.56162	21.53306
649369.27	4184399.61	649369.27_4184399.61	0.04659	1.10259	4.67169	0.10957	0.09074	0.19816	0.56317	21.52551
649169.27	4184419.61	649169.27_4184419.61	0.0467	3.09574	14.93667	0.11665	0.08629	0.19105	0.5426	12.69712
649189.27	4184419.61	649189.27_4184419.61	0.04671	2.54393	12.44381	0.11619	0.0867	0.19231	0.54848	13.45195
649209.27	4184419.61	649209.27_4184419.61	0.04676	2.17104	10.59627	0.11541	0.08722	0.19367	0.55466	14.12699
649229.27	4184419.61	649229.27_4184419.61	0.04675	1.89842	9.20648	0.11414	0.0877	0.19482	0.55965	14.66072
649249.27	4184419.61	649249.27_4184419.61	0.04676	1.69268	8.09558	0.11263	0.08824	0.19599	0.56452	15.17001
649269.27	4184419.61	649269.27_4184419.61	0.04678	1.53101	7.19859	0.11103	0.08881	0.19711	0.56894	15.61209
649289.27	4184419.61	649289.27_4184419.61	0.04682	1.40145	6.46051	0.10955	0.08945	0.19826	0.57317	16.01178
649309.27	4184419.61	649309.27_4184419.61	0.04682	1.29305	5.84441	0.10823	0.09002	0.19916	0.57597	16.18708
649329.27	4184419.61	649329.27_4184419.61	0.04684	1.20268	5.32161	0.10731	0.09062	0.20003	0.57843	16.2881
649349.27	4184419.61	649349.27_4184419.61	0.04689	1.12612	4.8763	0.10686	0.09125	0.20085	0.58053	16.29726
649369.27	4184419.61	649369.27_4184419.61	0.04694	1.05986	4.48949	0.10688	0.09189	0.2016	0.58221	16.15401
649149.27	4184439.61	649149.27_4184439.61	0.04701	3.19902	15.29494	0.11408	0.0869	0.19339	0.55633	10.09091
649169.27	4184439.61	649169.27_4184439.61	0.04702	2.62593	12.82604	0.11387	0.08726	0.19462	0.56236	10.69702
649189.27	4184439.61	649189.27_4184439.61	0.04706	2.23199	10.93022	0.11341	0.08775	0.19599	0.56886	11.23694
649209.27	4184439.61	649209.27_4184439.61	0.04709	1.94626	9.4885	0.11252	0.08826	0.19728	0.57478	11.67655
649229.27	4184439.61	649229.27_4184439.61	0.04708	1.73032	8.35956	0.11121	0.08875	0.19841	0.57979	12.01013
649249.27	4184439.61	649249.27_4184439.61	0.0471	1.56361	7.44307	0.10971	0.08932	0.1996	0.58483	12.33221
649269.27	4184439.61	649269.27_4184439.61	0.04712	1.42885	6.68381	0.10813	0.08991	0.20071	0.58921	12.59819
649289.27	4184439.61	649289.27_4184439.61	0.04717	1.31873	6.04479	0.10671	0.09057	0.20188	0.59356	12.84116
649309.27	4184439.61	649309.27_4184439.61	0.04716	1.22484	5.50873	0.10545	0.09114	0.20272	0.59614	12.89002
649329.27	4184439.61	649329.27_4184439.61	0.04719	1.14585	5.04672	0.10461	0.09177	0.20358	0.59861	12.88045
649349.27	4184439.61	649349.27_4184439.61	0.04723	1.07796	4.64783	0.10421	0.0924	0.20437	0.60057	12.7613
649369.27	4184439.61	649369.27_4184439.61	0.04729	1.01901	4.30016	0.10429	0.09305	0.20512	0.6023	12.53222
649129.27	4184459.61	649129.27_4184459.61	0.04731	3.21798	15.39004	0.11146	0.08752	0.19574	0.57036	8.21771
649149.27	4184459.61	649149.27_4184459.61	0.04735	2.65852	12.88121	0.11147	0.08791	0.19711	0.57737	8.71676
649169.27	4184459.61	649169.27_4184459.61	0.04738	2.26703	11.06561	0.11125	0.08833	0.19842	0.58385	9.15379
649189.27	4184459.61	649189.27_4184459.61	0.04741	1.97675	9.63164	0.1107	0.08881	0.19974	0.59021	9.52793
649209.27	4184459.61	649209.27_4184459.61	0.04743	1.75679	8.50972	0.10974	0.08932	0.201	0.59612	9.82479
649229.27	4184459.61	649229.27_4184459.61	0.04744	1.58584	7.60328	0.10843	0.08986	0.20219	0.60148	10.05197
649249.27	4184459.61	649249.27_4184459.61	0.04745	1.4493	6.84454	0.10692	0.09044	0.20335	0.60645	10.24013
649269.27	4184459.61	649269.27_4184459.61	0.04747	1.33704	6.2048	0.10537	0.09105	0.20446	0.61087	10.39442
649289.27	4184459.61	649289.27_4184459.61	0.04752	1.24288	5.65092	0.10398	0.09172	0.20557	0.61504	10.51621
649309.27	4184459.61	649309.27_4184459.61	0.04751	1.16196	5.18734	0.10279	0.0923	0.2064	0.61757	10.505
649329.27	4184459.61	649329.27_4184459.61	0.04754	1.09281	4.77913	0.10202	0.09294	0.20725	0.61999	10.42994
649349.27	4184459.61	649349.27_4184459.61	0.04759	1.03277	4.42296	0.10169	0.09358	0.20802	0.62191	10.25446
649369.27	4184459.61	649369.27_4184459.61	0.04765	0.98023	4.10916	0.10182	0.09425	0.20875	0.62367	9.99098
649109.27	4184479.61	649109.27_4184479.61	0.04759	3.16798	15.24817	0.10887	0.08817	0.19812	0.58477	6.82648
649129.27	4184479.61	649129.27_4184479.61	0.04763	2.63616	12.87761	0.10892	0.0885	0.19947	0.59202	7.23279
649149.27	4184479.61	649149.27_4184479.61	0.04767	2.2651	11.08688	0.1089	0.08889	0.20081	0.59897	7.59092
649169.27	4184479.61	649169.27_4184479.61	0.04771	1.98657	9.69062	0.10866	0.08935	0.20217	0.60585	7.90687
649189.27	4184479.61	649189.27_4184479.61	0.04773	1.76874	8.57927	0.10803	0.08984	0.20347	0.61224	8.16844
649209.27	4184479.61	649209.27_4184479.61	0.04776	1.59717	7.67508	0.10703	0.09039	0.20476	0.6184	8.37479
649229.27	4184479.61	649229.27_4184479.61	0.04778	1.45979	6.92812	0.10571	0.09097	0.20599	0.62404	8.52481
649249.27	4184479.61	649249.27_4184479.61	0.04781	1.34779	6.29624	0.10422	0.09158	0.20718	0.62923	8.63753
649269.27	4184479.61	649269.27_4184479.61	0.04783	1.25396	5.75774	0.1027	0.09221	0.20828	0.63366	8.7115
649289.27	4184479.61	649289.27_4184479.61	0.04786	1.1738	5.28968	0.10134	0.09286	0.2093	0.63744	8.74437
649309.27	4184479.61	649309.27_4184479.61	0.04788	1.10435	4.88183	0.10025	0.0935	0.21021	0.64042	8.71089
649329.27	4184479.61	649329.27_4184479.61	0.04791	1.04391	4.52182	0.09956	0.09416	0.21106	0.64287	8.60327
649349.27	4184479.61	649349.27_4184479.61	0.04797	0.99085	4.20317	0.0993	0.09482	0.21183	0.64487	8.41443
649369.27	4184479.61	649369.27_4184479.61	0.04801	0.94365	3.92239	0.09944	0.09546	0.21245	0.64617	8.13391
649089.27	4184499.61	649089.27_4184499.61	0.04787	3.03346	14.63971	0.10643	0.08886	0.2006	0.59979	5.76621
649109.27	4184499.61	649109.27_4184499.61	0.04792	2.56151	12.53978	0.1064	0.08915	0.20195	0.60744	6.10189
649129.27	4184499.61	649129.27_4184499.61	0.04796	2.22422	10.89617	0.10648	0.08951	0.20331	0.6149	6.40194
649149.27	4184499.61	649149.27_4184499.61	0.048	1.96934	9.59407	0.10645	0.08993	0.20468	0.62215	6.66576
649169.27	4184499.61	649169.27_4184499.61	0.04803	1.76521	8.53807	0.10614	0.09039	0.20601	0.62903	6.89271
649189.27	4184499.61	649189.27_4184499.61	0.04806	1.59896	7.66902	0.10546	0.09091	0.20733	0.63564	7.08023
649209.27	4184499.61	649209.27_4184499.61	0.0481	1.46337	6.94528	0.10441	0.09148	0.20862	0.64197	7.22253
649069.27	4184519.61	649069.27_4184519.61	0.04816	2.81701	13.65728	0.1042	0.08962	0.20318	0.61539	4.94072
649089.27	4184519.61	649089.27_4184519.61	0.04821	2.43639	11.94167	0.10401	0.08986	0.20455	0.62371	5.22137
649109.27	4184519.61	649109.27_4184519.61	0.04827	2.14797	10.52623	0.10407	0.09018	0.20593	0.63175	5.47686
649129.27	4184519.61	649129.27_4184519.61	0.04831	1.92382	9.36519	0.10416	0.09056	0.20732	0.63947	5.70219
649149.27	4184519.61	649149.27_4184519.61	0.04835	1.74222	8.40059	0.1041	0.091	0.20868	0.64684	5.89737
649169.27	4184519.61	649169.27_4184519.61	0.04838	1.58958	7.59058	0.10373	0.09149	0.21002	0.65394	6.06464
649189.27	4184519.61	649189.27_4184519.61	0.04842	1.46042	6.90423	0.10299	0.09204	0.21135	0.66079	6.20007
649209.27	4184519.61	649209.27_4184519.61	0.04845	1.35154	6.31712	0.10189	0.09262	0.21263	0.66716	6.2947
649049.27	4184539.61	649049.27_4184539.61	0.04845	2.58223	12.54866	0.10222	0.09044	0.20589	0.6317	4.28657
649069.27	4184539.61	649069.27_4184539.61	0.04851	2.28503	11.20835	0.1018	0.09064	0.20725	0.64067	4.52187
649089.27	4184539.61	649089.27_4184539.61	0.04858	2.04745	10.00611	0.10175	0.09094	0.20871	0.64965	4.74206
649109.27	4184539.61	649109.27_4184539.61	0.04865	1.8559	8.99344	0.10188	0.09129	0.21015	0.65816	4.9393
649129.27	4184539.61	649129.27_4184539.61	0.04869	1.69869	8.15527	0.10197	0.09169	0.21154	0.66607	5.11047
649149.27	4184539.61	649149.27_4184539.61	0.04873	1.56498	7.43284	0.10187	0.09214	0.2129	0.67364	5.25758

649169.27	4184539.61	649169.27_4184539.61	0.04877	1.44799	6.797	0.10144	0.09267	0.21427	0.68108	5.38255
649189.27	4184539.61	649189.27_4184539.61	0.04881	1.34567	6.24508	0.10064	0.09324	0.2156	0.68814	5.47911
649209.27	4184539.61	649209.27_4184539.61	0.04883	1.25721	5.76976	0.09949	0.09383	0.21685	0.69453	5.53876
649049.27	4184559.61	649049.27_4184559.61	0.04881	2.14995	10.51899	0.09981	0.09148	0.21008	0.65832	3.95763
649069.27	4184559.61	649069.27_4184559.61	0.04889	1.94774	9.4798	0.09956	0.09172	0.21155	0.66806	4.14621
649089.27	4184559.61	649089.27_4184559.61	0.04895	1.78198	8.63621	0.09958	0.09201	0.21293	0.67688	4.31747
649109.27	4184559.61	649109.27_4184559.61	0.04898	1.64327	7.8998	0.0997	0.09233	0.21426	0.68496	4.46608
649129.27	4184559.61	649129.27_4184559.61	0.04902	1.52609	7.24096	0.09977	0.09274	0.21564	0.69305	4.59506
649149.27	4184559.61	649149.27_4184559.61	0.04907	1.42366	6.66488	0.09962	0.09323	0.21703	0.701	4.70543
649169.27	4184559.61	649169.27_4184559.61	0.0491	1.33118	6.15559	0.09912	0.09376	0.21838	0.7085	4.79421
649189.27	4184559.61	649189.27_4184559.61	0.04914	1.24868	5.70568	0.09826	0.09436	0.21971	0.71576	4.85923
649209.27	4184559.61	649209.27_4184559.61	0.04917	1.17589	5.30631	0.09709	0.09499	0.22099	0.72252	4.89303
649069.27	4184579.61	649069.27_4184579.61	0.04925	1.71985	8.30815	0.09741	0.09278	0.21586	0.69656	3.80779
649089.27	4184579.61	649089.27_4184579.61	0.04929	1.59359	7.64118	0.09748	0.09306	0.21718	0.70531	3.9407
649109.27	4184579.61	649109.27_4184579.61	0.04934	1.48712	7.0365	0.09764	0.09344	0.21859	0.71408	4.05681
649129.27	4184579.61	649129.27_4184579.61	0.04938	1.39517	6.50518	0.09769	0.09388	0.21998	0.72245	4.15455
649149.27	4184579.61	649149.27_4184579.61	0.04943	1.31288	6.03452	0.09748	0.09438	0.22137	0.73058	4.2355
649169.27	4184579.61	649169.27_4184579.61	0.04946	1.23737	5.61423	0.09692	0.09494	0.22272	0.73838	4.29783
649189.27	4184579.61	649189.27_4184579.61	0.0495	1.16891	5.23844	0.096	0.09556	0.22406	0.7459	4.33837
649209.27	4184579.61	649209.27_4184579.61	0.04954	1.10749	4.90045	0.09479	0.09621	0.22533	0.75277	4.35017
649089.27	4184599.61	649089.27_4184599.61	0.04965	1.455	6.86214	0.0955	0.09418	0.22164	0.73608	3.60915
649109.27	4184599.61	649109.27_4184599.61	0.0497	1.36868	6.35967	0.09566	0.09457	0.22305	0.74508	3.69805
649129.27	4184599.61	649129.27_4184599.61	0.04975	1.29328	5.91484	0.09567	0.09503	0.22444	0.75371	3.77064
649149.27	4184599.61	649149.27_4184599.61	0.04979	1.22482	5.5181	0.09539	0.09556	0.22582	0.7621	3.8282
649169.27	4184599.61	649169.27_4184599.61	0.04983	1.16133	5.16185	0.09477	0.09615	0.22719	0.77024	3.86914
649189.27	4184599.61	649189.27_4184599.61	0.04987	1.10307	4.84089	0.09381	0.09679	0.22853	0.77805	3.89049
649209.27	4184599.61	649209.27_4184599.61	0.04991	1.05016	4.54958	0.09257	0.09745	0.22979	0.78508	3.88598
649089.27	4184619.61	649089.27_4184619.61	0.05005	1.34922	6.2352	0.09362	0.09536	0.22633	0.76948	3.31597
649109.27	4184619.61	649109.27_4184619.61	0.0501	1.27716	5.81136	0.09378	0.09578	0.22776	0.77896	3.38387
649129.27	4184619.61	649129.27_4184619.61	0.05015	1.21341	5.43321	0.09375	0.09627	0.22917	0.788	3.43725
649149.27	4184619.61	649149.27_4184619.61	0.0502	1.1548	5.09191	0.09341	0.09683	0.23056	0.79677	3.47651
649169.27	4184619.61	649169.27_4184619.61	0.05024	1.09991	4.78133	0.09273	0.09744	0.23195	0.80533	3.5009
649189.27	4184619.61	649189.27_4184619.61	0.05028	1.04901	4.49987	0.09172	0.0981	0.23328	0.81337	3.50688
649209.27	4184619.61	649209.27_4184619.61	0.0503	1.00231	4.24705	0.09044	0.09876	0.23445	0.82009	3.48884
649089.27	4184639.61	649089.27_4184639.61	0.0504	1.26496	5.7382	0.09176	0.09649	0.23095	0.80396	3.05067
649109.27	4184639.61	649109.27_4184639.61	0.05046	1.2032	5.36692	0.0919	0.09695	0.2324	0.81387	3.10046
649129.27	4184639.61	649129.27_4184639.61	0.0505	1.1476	5.03267	0.0918	0.09745	0.23379	0.82312	3.13633
649149.27	4184639.61	649149.27_4184639.61	0.05056	1.09641	4.73222	0.09141	0.09804	0.23522	0.83249	3.1608
649169.27	4184639.61	649169.27_4184639.61	0.0506	1.0479	4.45843	0.09067	0.09867	0.23659	0.84127	3.17087
649189.27	4184639.61	649189.27_4184639.61	0.05064	1.00279	4.20936	0.08962	0.09936	0.23792	0.84964	3.16568
649209.27	4184639.61	649209.27_4184639.61	0.05068	0.96136	3.98182	0.08836	0.10007	0.23918	0.85714	3.14261
648820.48	4184668.02	648820.48_4184668.02	0.04951	3.63802	17.50301	0.10111	0.09632	0.2147	0.68231	1.67003
648840.48	4184668.02	648840.48_4184668.02	0.04961	3.08788	15.16912	0.10021	0.09642	0.21663	0.69329	1.75142
648860.48	4184668.02	648860.48_4184668.02	0.04974	2.7016	13.38029	0.09901	0.09651	0.2186	0.70532	1.83734
648880.48	4184668.02	648880.48_4184668.02	0.04987	2.41143	11.96414	0.09755	0.09656	0.22058	0.71818	1.9265
648900.48	4184668.02	648900.48_4184668.02	0.05	2.18184	10.80365	0.09592	0.0966	0.22249	0.7317	2.01755
648920.48	4184668.02	648920.48_4184668.02	0.05011	1.99391	9.82326	0.09422	0.0966	0.22428	0.7454	2.10855
648940.48	4184668.02	648940.48_4184668.02	0.05023	1.83916	8.98324	0.09259	0.09663	0.22607	0.75988	2.19923
648960.48	4184668.02	648960.48_4184668.02	0.05037	1.70846	8.24682	0.09117	0.0967	0.22787	0.77507	2.28857
648980.48	4184668.02	648980.48_4184668.02	0.05046	1.59325	7.60199	0.08999	0.09674	0.22944	0.78909	2.37361
649000.48	4184668.02	649000.48_4184668.02	0.05057	1.49218	7.02929	0.08921	0.09687	0.23107	0.80343	2.45534
649020.48	4184668.02	649020.48_4184668.02	0.05067	1.4033	6.52032	0.08883	0.09707	0.23269	0.81727	2.53149
649040.48	4184668.02	649040.48_4184668.02	0.05076	1.32521	6.06759	0.08876	0.09731	0.23422	0.82994	2.59915
649060.48	4184668.02	649060.48_4184668.02	0.05086	1.25703	5.66211	0.08894	0.09765	0.23581	0.84244	2.65794
649080.48	4184668.02	649080.48_4184668.02	0.05094	1.19654	5.29826	0.0892	0.09805	0.23735	0.85405	2.70504
649100.48	4184668.02	649100.48_4184668.02	0.05098	1.14272	4.97778	0.08935	0.09848	0.23874	0.86423	2.7387
649120.48	4184668.02	649120.48_4184668.02	0.05104	1.09452	4.68409	0.0893	0.099	0.24018	0.87444	2.76168
649140.48	4184668.02	649140.48_4184668.02	0.05109	1.04971	4.41672	0.08896	0.09958	0.2416	0.88435	2.7738
649160.48	4184668.02	649160.48_4184668.02	0.05113	1.00704	4.17253	0.08828	0.10023	0.24298	0.89393	2.77518
649180.48	4184668.02	649180.48_4184668.02	0.05118	0.96663	3.94899	0.08729	0.10093	0.24433	0.903	2.76505
649200.48	4184668.02	649200.48_4184668.02	0.05122	0.92913	3.74442	0.08609	0.10167	0.24564	0.91144	2.74273
649220.48	4184668.02	649220.48_4184668.02	0.05127	0.89475	3.55682	0.08478	0.10245	0.2469	0.91907	2.70782
648800.48	4184688.02	648800.48_4184688.02	0.04976	3.43864	16.63598	0.09942	0.09725	0.21723	0.70028	1.54463
648820.48	4184688.02	648820.48_4184688.02	0.04989	2.96378	14.55582	0.09879	0.09745	0.21936	0.71264	1.61703
648840.48	4184688.02	648840.48_4184688.02	0.04998	2.61149	12.91448	0.09776	0.09755	0.22134	0.72468	1.69223
648860.48	4184688.02	648860.48_4184688.02	0.05012	2.34598	11.59756	0.09649	0.09764	0.22341	0.73817	1.77089
648880.48	4184688.02	648880.48_4184688.02	0.05025	2.13316	10.50924	0.09499	0.09769	0.22544	0.75222	1.85125
648900.48	4184688.02	648900.48_4184688.02	0.05039	1.95806	9.58736	0.09338	0.09773	0.22742	0.76695	1.93224
648920.48	4184688.02	648920.48_4184688.02	0.05049	1.81088	8.79483	0.09172	0.09772	0.22922	0.78149	2.01205
648940.48	4184688.02	648940.48_4184688.02	0.05061	1.68646	8.10075	0.09019	0.09775	0.23102	0.79681	2.09071
648960.48	4184688.02	648960.48_4184688.02	0.05077	1.57882	7.47489	0.08891	0.09786	0.23293	0.81334	2.168
648980.48	4184688.02	648980.48_4184688.02	0.05085	1.48236	6.94002	0.08788	0.0979	0.23448	0.82781	2.24014
649000.48	4184688.02	649000.48_4184688.02	0.05095	1.39639	6.45077	0.08725	0.09803	0.2361	0.84267	2.3085
649020.48	4184688.02	649020.48_4184688.02	0.05107	1.32081	6.00981	0.08701	0.09826	0.23779	0.85748	2.37136
649040.48	4184688.02	649040.48_4184688.02	0.05115	1.25369	5.61871	0.08703	0.0985	0.23929	0.87045	2.42508
649060.48	4184688.02	649060.48_4184688.02	0.05125	1.19446	5.26192	0.08726	0.09887	0.2409	0.88357	2.47023
649080.48	4184688.02	649080.48_4184688.02	0.05133	1.14144	4.94219	0.08752	0.09929	0.24244	0.89555	2.50428
649100.48	4184688.02	649100.48_4184688.02	0.05138	1.09393	4.65681	0.08764	0.09974	0.24384	0.90627	2.52642
649120.48	4184688.02	649120.48_4184688.02	0.05144	1.051	4.39375	0.08755	0.1003	0.24531	0.91719	2.53943
649140.48	4184688.02	649140.48_4184688.02	0.0515	1.01066	4.153	0.08715	0.10092	0.24674	0.92771	2.5429
649160.48	4184688.02	649160.48_4184688.02	0.05155	0.97201	3.93166	0.08642	0.1016	0.24817	0.93798	2.5377
649180.48	4184688.02	649180.48_4184688.02	0.05159	0.93498	3.72835	0.08539	0.10231	0.2495	0.94728	2.52218
649200.48	4184688.02	649200.48_4184688.02	0.05163	0.90046	3.54112	0.08418	0.10308	0.25082	0.95605	2.49731
649220.48	4184688.02	649220.48_4184688.02	0.05168	0.86858	3.36839	0.08288	0.10388	0.25208	0.96392	2.46254
648780.48	4184708.02	648780.48_4184708.02	0.05004	3.27139	15.81011	0.09771	0.09819	0.21992	0.71933	1.4342
648800.48	4184708.02	648800.48_4184708.02	0.05012	2.84635	14.00502	0.09724	0.09839	0.22192	0.73129	1.49755

648820.48	4184708.02	648820.48_4184708.02	0.05026	2.53926	12.50377	0.09649	0.0986	0.22419	0.74532	1.5653
648840.48	4184708.02	648840.48_4184708.02	0.05037	2.2922	11.28388	0.09537	0.09871	0.22627	0.75889	1.63459
648860.48	4184708.02	648860.48_4184708.02	0.0505	2.09385	10.26069	0.09403	0.09879	0.2284	0.77358	1.70595
648880.48	4184708.02	648880.48_4184708.02	0.05065	1.92952	9.38481	0.09253	0.09887	0.23052	0.78924	1.77812
648900.48	4184708.02	648900.48_4184708.02	0.05079	1.79018	8.6253	0.09093	0.09891	0.23255	0.80515	1.84981
648920.48	4184708.02	648920.48_4184708.02	0.05091	1.67129	7.96938	0.08936	0.09891	0.23443	0.82099	1.91995
648940.48	4184708.02	648940.48_4184708.02	0.05103	1.56793	7.38295	0.08793	0.09894	0.23626	0.83736	1.98823
648960.48	4184708.02	648960.48_4184708.02	0.05117	1.47596	6.84879	0.08676	0.09903	0.23811	0.85426	2.05391
648980.48	4184708.02	648980.48_4184708.02	0.05127	1.39353	6.38629	0.08591	0.09911	0.23976	0.87006	2.11558
649000.48	4184708.02	649000.48_4184708.02	0.05137	1.31938	5.96368	0.08541	0.09925	0.24139	0.88557	2.17229
649020.48	4184708.02	649020.48_4184708.02	0.05148	1.25359	5.57644	0.08528	0.09948	0.24305	0.90076	2.22286
649040.48	4184708.02	649040.48_4184708.02	0.05157	1.19513	5.2315	0.0854	0.09976	0.24461	0.91465	2.26508
649060.48	4184708.02	649060.48_4184708.02	0.05167	1.14261	4.91323	0.08565	0.10015	0.24622	0.92819	2.29835
649080.48	4184708.02	649080.48_4184708.02	0.05173	1.09549	4.63316	0.0859	0.10056	0.24768	0.94025	2.32124
649100.48	4184708.02	649100.48_4184708.02	0.05178	1.05298	4.37602	0.08599	0.10105	0.24912	0.95166	2.33424
649120.48	4184708.02	649120.48_4184708.02	0.05184	1.0141	4.13837	0.08584	0.10162	0.25058	0.96308	2.33895
649140.48	4184708.02	649140.48_4184708.02	0.05192	0.97751	3.91575	0.08539	0.10232	0.25214	0.97508	2.33724
649160.48	4184708.02	649160.48_4184708.02	0.05198	0.94199	3.7133	0.08461	0.10302	0.25356	0.98583	2.3269
649180.48	4184708.02	649180.48_4184708.02	0.05202	0.90794	3.52848	0.08355	0.10376	0.25489	0.99556	2.30858
649200.48	4184708.02	649200.48_4184708.02	0.05206	0.8759	3.35572	0.08233	0.10455	0.25621	1.00463	2.28272
649220.48	4184708.02	649220.48_4184708.02	0.05211	0.8461	3.19668	0.08104	0.10536	0.25746	1.0125	2.2488
648760.48	4184728.02	648760.48_4184728.02	0.0503	3.13125	15.21683	0.09589	0.09906	0.22249	0.7378	1.33532
648780.48	4184728.02	648780.48_4184728.02	0.05044	2.76722	13.5069	0.09571	0.09941	0.22483	0.75224	1.39295
648800.48	4184728.02	648800.48_4184728.02	0.05054	2.48225	12.17443	0.09512	0.09962	0.227	0.76599	1.45271
648820.48	4184728.02	648820.48_4184728.02	0.05065	2.25426	11.04062	0.09421	0.09978	0.22919	0.7805	1.51468
648840.48	4184728.02	648840.48_4184728.02	0.05079	2.06773	10.06147	0.09304	0.09993	0.23148	0.79639	1.57863
648860.48	4184728.02	648860.48_4184728.02	0.05091	1.91045	9.23843	0.09164	0.09998	0.23359	0.81208	1.64267
648880.48	4184728.02	648880.48_4184728.02	0.05103	1.77709	8.5162	0.09012	0.10002	0.23568	0.82851	1.70672
648900.48	4184728.02	648900.48_4184728.02	0.05116	1.66244	7.87985	0.08856	0.10004	0.2377	0.84535	1.76972
648920.48	4184728.02	648920.48_4184728.02	0.05128	1.56245	7.31418	0.08706	0.10005	0.23963	0.86245	1.831
648940.48	4184728.02	648940.48_4184728.02	0.05141	1.47386	6.80538	0.08575	0.1001	0.24151	0.87997	1.88999
648960.48	4184728.02	648960.48_4184728.02	0.05154	1.39398	6.34656	0.08471	0.10017	0.24333	0.89745	1.94593
648980.48	4184728.02	648980.48_4184728.02	0.05166	1.32158	5.93188	0.08401	0.10028	0.24506	0.91455	1.9977
649000.48	4184728.02	649000.48_4184728.02	0.05176	1.25651	5.55692	0.08365	0.10044	0.24672	0.93083	2.04412
649020.48	4184728.02	649020.48_4184728.02	0.05187	1.1986	5.21412	0.08362	0.10069	0.24837	0.94662	2.08416
649040.48	4184728.02	649040.48_4184728.02	0.05198	1.14659	4.89941	0.08381	0.10103	0.25003	0.9618	2.11649
649060.48	4184728.02	649060.48_4184728.02	0.05208	1.09935	4.61035	0.08409	0.10145	0.25168	0.97621	2.13978
649080.48	4184728.02	649080.48_4184728.02	0.05214	1.05701	4.36211	0.08432	0.10186	0.25309	0.9885	2.1541
649100.48	4184728.02	649100.48_4184728.02	0.05219	1.01843	4.12824	0.08438	0.10238	0.25454	1.00065	2.15975
649120.48	4184728.02	649120.48_4184728.02	0.05225	0.98279	3.91138	0.08416	0.10298	0.256	1.01267	2.15826
649140.48	4184728.02	649140.48_4184728.02	0.05233	0.94903	3.70703	0.08366	0.1037	0.25759	1.02546	2.15175
649160.48	4184728.02	649160.48_4184728.02	0.05238	0.91613	3.52328	0.08282	0.10442	0.25896	1.03638	2.13783
649180.48	4184728.02	649180.48_4184728.02	0.05241	0.88439	3.35299	0.08172	0.10516	0.26026	1.04617	2.11745
649200.48	4184728.02	649200.48_4184728.02	0.05245	0.85443	3.1941	0.08049	0.10596	0.26154	1.0552	2.09118
649220.48	4184728.02	649220.48_4184728.02	0.05251	0.82661	3.04559	0.07924	0.10682	0.26286	1.0639	2.06005
648740.48	4184748.02	648740.48_4184748.02	0.05058	3.06572	14.97972	0.09405	0.09988	0.22519	0.75695	1.24714
648760.48	4184748.02	648760.48_4184748.02	0.05066	2.7166	13.3924	0.094	0.10023	0.22733	0.7708	1.29808
648780.48	4184748.02	648780.48_4184748.02	0.05078	2.452	12.04073	0.09366	0.10056	0.22971	0.78634	1.35222
648800.48	4184748.02	648800.48_4184748.02	0.05094	2.2367	10.89625	0.09298	0.10085	0.23219	0.80294	1.40845
648820.48	4184748.02	648820.48_4184748.02	0.05106	2.05665	9.96179	0.09197	0.10102	0.23448	0.81918	1.46557
648840.48	4184748.02	648840.48_4184748.02	0.05114	1.90343	9.16931	0.0907	0.10107	0.2366	0.83518	1.52284
648860.48	4184748.02	648860.48_4184748.02	0.05126	1.77287	8.46068	0.08927	0.10112	0.23877	0.85234	1.58028
648880.48	4184748.02	648880.48_4184748.02	0.0514	1.66124	7.83495	0.08777	0.10116	0.24093	0.87038	1.63715
648900.48	4184748.02	648900.48_4184748.02	0.05153	1.56352	7.27826	0.08627	0.10119	0.243	0.88866	1.69254
648920.48	4184748.02	648920.48_4184748.02	0.05166	1.47677	6.77892	0.08487	0.10121	0.24499	0.90713	1.74578
648940.48	4184748.02	648940.48_4184748.02	0.05179	1.39866	6.3283	0.08367	0.10126	0.2469	0.92575	1.79646
648960.48	4184748.02	648960.48_4184748.02	0.05191	1.32742	5.91984	0.08277	0.10133	0.24872	0.94402	1.84353
648980.48	4184748.02	648980.48_4184748.02	0.05203	1.26289	5.54824	0.0822	0.10146	0.25047	0.96199	1.88638
649000.48	4184748.02	649000.48_4184748.02	0.05214	1.2049	5.20952	0.08197	0.10164	0.25215	0.97918	1.92367
649020.48	4184748.02	649020.48_4184748.02	0.05225	1.15304	4.90057	0.08203	0.10191	0.2538	0.99567	1.95448
649040.48	4184748.02	649040.48_4184748.02	0.05236	1.10626	4.61779	0.08228	0.10227	0.25548	1.01167	1.97815
649060.48	4184748.02	649060.48_4184748.02	0.05248	1.06346	4.35313	0.08259	0.10274	0.2572	1.0274	1.994
649080.48	4184748.02	649080.48_4184748.02	0.05254	1.02462	4.12284	0.08279	0.10319	0.25866	1.0406	2.00123
649100.48	4184748.02	649100.48_4184748.02	0.0526	0.9891	3.90774	0.08279	0.10374	0.26012	1.05349	2.00115
649120.48	4184748.02	649120.48_4184748.02	0.05266	0.95606	3.70807	0.08252	0.10436	0.26158	1.06622	1.99523
649140.48	4184748.02	649140.48_4184748.02	0.05275	0.92466	3.51991	0.08196	0.10512	0.26319	1.07988	1.98557
649160.48	4184748.02	649160.48_4184748.02	0.05279	0.89385	3.35017	0.08107	0.10585	0.26456	1.09121	1.96962
649180.48	4184748.02	649180.48_4184748.02	0.05282	0.86405	3.19167	0.07996	0.10662	0.26586	1.10141	1.9488
649200.48	4184748.02	649200.48_4184748.02	0.05286	0.83588	3.04376	0.07872	0.10745	0.26716	1.11085	1.92363
649220.48	4184748.02	649220.48_4184748.02	0.05293	0.80963	2.90518	0.07751	0.10835	0.26852	1.12	1.8949
648720.48	4184768.02	648720.48_4184768.02	0.05087	3.116	15.29943	0.09218	0.10067	0.22801	0.77684	1.16805
648740.48	4184768.02	648740.48_4184768.02	0.05095	2.74756	13.56555	0.09231	0.10111	0.23017	0.79164	1.21411
648760.48	4184768.02	648760.48_4184768.02	0.05108	2.47188	12.14812	0.09216	0.10152	0.23259	0.80803	1.26294
648780.48	4184768.02	648780.48_4184768.02	0.05118	2.25079	10.99698	0.09165	0.10181	0.23497	0.8244	1.31323
648800.48	4184768.02	648800.48_4184768.02	0.05133	2.06951	10.01415	0.09084	0.10207	0.23745	0.84221	1.36505
648820.48	4184768.02	648820.48_4184768.02	0.05145	1.91653	9.18287	0.08976	0.10224	0.23986	0.86042	1.41729
648840.48	4184768.02	648840.48_4184768.02	0.05155	1.78553	8.47976	0.08846	0.1023	0.24208	0.87838	1.46914
648860.48	4184768.02	648860.48_4184768.02	0.05166	1.67238	7.85078	0.08702	0.10234	0.24429	0.89713	1.52032
648880.48	4184768.02	648880.48_4184768.02	0.0518	1.57447	7.29082	0.08554	0.10238	0.24649	0.91669	1.57049
648900.48	4184768.02	648900.48_4184768.02	0.05193	1.48788	6.78965	0.0841	0.10241	0.24862	0.93654	1.61886
648920.48	4184768.02	648920.48_4184768.02	0.05206	1.40988	6.3382	0.0828	0.10244	0.25064	0.95627	1.6648
648940.48	4184768.02	648940.48_4184768.02	0.05219	1.33889	5.92931	0.08173	0.10249	0.25256	0.97589	1.70779
648960.48	4184768.02	648960.48_4184768.02	0.05232	1.27404	5.55747	0.08095	0.10257	0.25438	0.99509	1.747
648980.48	4184768.02	648980.48_4184768.02	0.05244	1.21555	5.21831	0.08052	0.10271	0.25615	1.01406	1.78187
649000.48	4184768.02	649000.48_4184768.02	0.05256	1.16317	4.90838	0.08041	0.10292	0.25789	1.03253	1.81139
649020.48	4184768.02	649020.48_4184768.02	0.05266	1.11586	4.62501	0.08054	0.10321	0.25955	1.04991	1.83439

649040.48	4184768.02	649040.48_4184768.02	0.05277	1.07277	4.36534	0.08083	0.10358	0.26121	1.0665	1.85047
649060.48	4184768.02	649060.48_4184768.02	0.0529	1.0333	4.12177	0.08113	0.10408	0.26295	1.08321	1.85979
649080.48	4184768.02	649080.48_4184768.02	0.05296	0.9973	3.90877	0.0813	0.10456	0.26441	1.09723	1.86157
649100.48	4184768.02	649100.48_4184768.02	0.05302	0.96421	3.70944	0.08125	0.10513	0.26588	1.11096	1.85734
649120.48	4184768.02	649120.48_4184768.02	0.05307	0.9332	3.52415	0.08091	0.10579	0.26735	1.1244	1.84823
649140.48	4184768.02	649140.48_4184768.02	0.05316	0.90371	3.35017	0.0803	0.10657	0.26897	1.13891	1.83658
649160.48	4184768.02	649160.48_4184768.02	0.0532	0.87459	3.19204	0.07937	0.10732	0.27032	1.1506	1.81964
649180.48	4184768.02	649180.48_4184768.02	0.05324	0.84646	3.04365	0.07824	0.10813	0.27168	1.16155	1.79943
649200.48	4184768.02	649200.48_4184768.02	0.05328	0.81969	2.90554	0.07701	0.10897	0.27297	1.17111	1.77545
649220.48	4184768.02	649220.48_4184768.02	0.05336	0.7947	2.77627	0.07583	0.1099	0.27436	1.18054	1.74896
648720.48	4184788.02	648720.48_4184788.02	0.05124	2.87837	14.25176	0.09057	0.1019	0.23302	0.81273	1.13835
648740.48	4184788.02	648740.48_4184788.02	0.05134	2.55659	12.63317	0.09057	0.10236	0.23536	0.82922	1.18229
648760.48	4184788.02	648760.48_4184788.02	0.05146	2.31247	11.33705	0.09026	0.10274	0.23785	0.84679	1.22809
648780.48	4184788.02	648780.48_4184788.02	0.0516	2.11717	10.26338	0.08965	0.10309	0.24045	0.86576	1.2752
648800.48	4184788.02	648800.48_4184788.02	0.05168	1.95326	9.37963	0.08871	0.10327	0.2428	0.88394	1.3222
648820.48	4184788.02	648820.48_4184788.02	0.05181	1.81653	8.61529	0.08757	0.10343	0.24528	0.90408	1.36961
648840.48	4184788.02	648840.48_4184788.02	0.05197	1.70014	7.94514	0.08628	0.10358	0.24782	0.92566	1.41684
648860.48	4184788.02	648860.48_4184788.02	0.05208	1.59817	7.37018	0.08485	0.1036	0.25005	0.94606	1.46213
648880.48	4184788.02	648880.48_4184788.02	0.0522	1.5087	6.85399	0.0834	0.10362	0.25226	0.96701	1.50597
648900.48	4184788.02	648900.48_4184788.02	0.05236	1.42958	6.38848	0.08205	0.10367	0.25449	0.98891	1.54812
648920.48	4184788.02	648920.48_4184788.02	0.0525	1.35749	5.96797	0.08085	0.10372	0.25659	1.0104	1.58753
648940.48	4184788.02	648940.48_4184788.02	0.05263	1.29166	5.58947	0.0799	0.10379	0.25854	1.0313	1.6237
648960.48	4184788.02	648960.48_4184788.02	0.05275	1.23175	5.24622	0.07926	0.10388	0.26038	1.05167	1.65601
648980.48	4184788.02	648980.48_4184788.02	0.05288	1.17779	4.93081	0.07895	0.10404	0.26217	1.07185	1.68392
649000.48	4184788.02	649000.48_4184788.02	0.053	1.12929	4.64221	0.07893	0.10428	0.26392	1.09131	1.70636
649020.48	4184788.02	649020.48_4184788.02	0.05311	1.08534	4.37815	0.07913	0.10459	0.26562	1.10983	1.72274
649040.48	4184788.02	649040.48_4184788.02	0.05322	1.04505	4.13631	0.07943	0.10498	0.26727	1.12733	1.73264
649060.48	4184788.02	649060.48_4184788.02	0.05332	1.00802	3.9127	0.07971	0.10547	0.26893	1.14424	1.73629
649080.48	4184788.02	649080.48_4184788.02	0.05339	0.9743	3.71355	0.07985	0.10599	0.27043	1.15948	1.7343
649100.48	4184788.02	649100.48_4184788.02	0.05345	0.9432	3.52842	0.07975	0.1066	0.27193	1.1743	1.72731
649120.48	4184788.02	649120.48_4184788.02	0.05351	0.91388	3.35625	0.07935	0.10728	0.2734	1.18858	1.7163
649140.48	4184788.02	649140.48_4184788.02	0.05359	0.88572	3.19326	0.07868	0.10807	0.275	1.2036	1.70314
649160.48	4184788.02	649160.48_4184788.02	0.05362	0.85796	3.04624	0.07771	0.10883	0.27631	1.21539	1.68586
649180.48	4184788.02	649180.48_4184788.02	0.05366	0.83113	2.90715	0.07657	0.10967	0.27768	1.22676	1.66639
649200.48	4184788.02	649200.48_4184788.02	0.05371	0.80546	2.77759	0.07536	0.11053	0.27897	1.23642	1.64384
648700.48	4184808.02	648700.48_4184808.02	0.05157	3.14978	15.5298	0.08881	0.10268	0.2361	0.83527	1.07023
648720.48	4184808.02	648720.48_4184808.02	0.05163	2.73242	13.52787	0.08895	0.10318	0.23831	0.85196	1.10992
648740.48	4184808.02	648740.48_4184808.02	0.05174	2.43574	11.99132	0.08881	0.10363	0.24078	0.87	1.15149
648760.48	4184808.02	648760.48_4184808.02	0.05188	2.21059	10.76155	0.08839	0.10405	0.24346	0.88994	1.19451
648780.48	4184808.02	648780.48_4184808.02	0.05196	2.02515	9.74588	0.08763	0.10432	0.24593	0.90917	1.23737
648800.48	4184808.02	648800.48_4184808.02	0.05207	1.87208	8.89364	0.08662	0.10451	0.24841	0.92963	1.28029
648820.48	4184808.02	648820.48_4184808.02	0.05219	1.74508	8.16839	0.08543	0.10466	0.25096	0.95184	1.32299
648840.48	4184808.02	648840.48_4184808.02	0.05234	1.63724	7.54056	0.08411	0.10479	0.25351	0.97527	1.36497
648860.48	4184808.02	648860.48_4184808.02	0.05251	1.54342	6.98274	0.08274	0.1049	0.25607	0.99969	1.40561
648880.48	4184808.02	648880.48_4184808.02	0.05264	1.45959	6.49462	0.08136	0.10493	0.25835	1.02269	1.44382
648900.48	4184808.02	648900.48_4184808.02	0.05277	1.38434	6.05734	0.08007	0.10495	0.26052	1.04547	1.47975
648920.48	4184808.02	648920.48_4184808.02	0.0529	1.31596	5.66384	0.07897	0.10498	0.26256	1.06778	1.51284
648940.48	4184808.02	648940.48_4184808.02	0.05303	1.25376	5.30631	0.07815	0.10504	0.26452	1.0899	1.54286
648960.48	4184808.02	648960.48_4184808.02	0.05317	1.19758	4.98053	0.07764	0.10516	0.26642	1.11191	1.56902
648980.48	4184808.02	648980.48_4184808.02	0.05332	1.14708	4.67877	0.07745	0.10538	0.26834	1.13416	1.59089
649000.48	4184808.02	649000.48_4184808.02	0.05341	1.10155	4.41333	0.07751	0.10559	0.26996	1.15364	1.60705
649020.48	4184808.02	649020.48_4184808.02	0.05353	1.06018	4.16495	0.07776	0.10593	0.27168	1.17341	1.61807
649040.48	4184808.02	649040.48_4184808.02	0.05363	1.02211	3.93833	0.07807	0.10635	0.27334	1.19194	1.62308
649060.48	4184808.02	649060.48_4184808.02	0.05375	0.98706	3.72651	0.07833	0.10688	0.27506	1.21047	1.62288
649080.48	4184808.02	649080.48_4184808.02	0.05382	0.95502	3.53873	0.07843	0.10744	0.27659	1.22686	1.61787
649100.48	4184808.02	649100.48_4184808.02	0.05389	0.92537	3.36331	0.07828	0.10809	0.27814	1.24316	1.60902
649120.48	4184808.02	649120.48_4184808.02	0.05396	0.89738	3.20051	0.07783	0.10882	0.2797	1.25903	1.59726
649140.48	4184808.02	649140.48_4184808.02	0.05404	0.87029	3.04824	0.07709	0.10963	0.28126	1.27436	1.58327
648700.48	4184828.02	648700.48_4184828.02	0.05196	3.02835	14.93368	0.08731	0.10397	0.24146	0.87608	1.04469
648720.48	4184828.02	648720.48_4184828.02	0.05207	2.64544	13.04298	0.08735	0.10453	0.24398	0.89563	1.08283
648740.48	4184828.02	648740.48_4184828.02	0.05217	2.36064	11.5463	0.08708	0.10498	0.24654	0.91523	1.1218
648760.48	4184828.02	648760.48_4184828.02	0.05229	2.14194	10.34475	0.08652	0.10537	0.24923	0.93633	1.16138
648780.48	4184828.02	648780.48_4184828.02	0.05235	1.96214	9.34867	0.08565	0.1056	0.25169	0.95685	1.20039
648800.48	4184828.02	648800.48_4184828.02	0.05247	1.81666	8.52062	0.08458	0.10579	0.25429	0.97986	1.23929
648820.48	4184828.02	648820.48_4184828.02	0.05258	1.69484	7.81606	0.08335	0.10593	0.25689	1.00416	1.27738
648840.48	4184828.02	648840.48_4184828.02	0.05275	1.59306	7.21178	0.08206	0.10608	0.2596	1.03072	1.31476
648860.48	4184828.02	648860.48_4184828.02	0.05291	1.50275	6.67655	0.0807	0.10617	0.26214	1.05684	1.35014
648880.48	4184828.02	648880.48_4184828.02	0.05305	1.42213	6.20231	0.07938	0.10622	0.26451	1.0822	1.38317
648900.48	4184828.02	648900.48_4184828.02	0.05316	1.34903	5.78223	0.07816	0.1062	0.2666	1.10579	1.41342
648920.48	4184828.02	648920.48_4184828.02	0.05329	1.28315	5.40229	0.07717	0.10624	0.26868	1.12969	1.44101
648940.48	4184828.02	648940.48_4184828.02	0.05343	1.22382	5.05923	0.07648	0.10633	0.2707	1.1536	1.46564
648960.48	4184828.02	648960.48_4184828.02	0.05358	1.17048	4.74804	0.0761	0.10647	0.27264	1.1772	1.48637
648980.48	4184828.02	648980.48_4184828.02	0.05374	1.12269	4.46131	0.07601	0.10672	0.2746	1.20118	1.50302
649000.48	4184828.02	649000.48_4184828.02	0.05382	1.0791	4.20834	0.07614	0.10693	0.27618	1.22131	1.51394
649020.48	4184828.02	649020.48_4184828.02	0.05394	1.03965	3.97333	0.07643	0.10729	0.27791	1.24242	1.52039
649040.48	4184828.02	649040.48_4184828.02	0.05405	1.00328	3.75844	0.07676	0.10775	0.27961	1.26249	1.52176
649060.48	4184828.02	649060.48_4184828.02	0.05418	0.96978	3.55663	0.07699	0.10834	0.28141	1.28297	1.5187
649080.48	4184828.02	649080.48_4184828.02	0.05423	0.93894	3.38157	0.07703	0.10888	0.28283	1.29947	1.5113
649100.48	4184828.02	649100.48_4184828.02	0.0543	0.9103	3.21541	0.07682	0.10956	0.28439	1.31675	1.50098
648700.48	4184848.02	648700.48_4184848.02	0.05235	2.94839	14.50914	0.08579	0.10529	0.24702	0.9202	1.01996
648720.48	4184848.02	648720.48_4184848.02	0.05245	2.57787	12.65352	0.08568	0.10582	0.24959	0.94096	1.05571
648740.48	4184848.02	648740.48_4184848.02	0.05258	2.30926	11.21492	0.08531	0.10632	0.25242	0.96358	1.09231
648760.48	4184848.02	648760.48_4184848.02	0.05267	2.09398	10.02363	0.08463	0.10667	0.25507	0.98578	1.12842
648780.48	4184848.02	648780.48_4184848.02	0.05276	1.92046	9.04278	0.0837	0.10692	0.25772	1.00931	1.16403
648800.48	4184848.02	648800.48_4184848.02	0.05287	1.7789	8.22634	0.08258	0.10711	0.26042	1.0348	1.19894
648820.48	4184848.02	648820.48_4184848.02	0.05301	1.66176	7.53751	0.08135	0.10727	0.26317	1.0625	1.23301

648840.48	4184848.02	648840.48_4184848.02	0.05317	1.56165	6.94237	0.08006	0.10741	0.26592	1.0914	1.26569
648860.48	4184848.02	648860.48_4184848.02	0.0533	1.47209	6.41709	0.07872	0.10744	0.26837	1.1186	1.29587
648880.48	4184848.02	648880.48_4184848.02	0.05348	1.39403	5.9525	0.07749	0.10754	0.27093	1.14748	1.32451
648900.48	4184848.02	648900.48_4184848.02	0.05357	1.32208	5.54167	0.07635	0.1075	0.27298	1.17228	1.34966
648920.48	4184848.02	648920.48_4184848.02	0.05371	1.25787	5.17187	0.07548	0.10755	0.27507	1.19784	1.37242
648940.48	4184848.02	648940.48_4184848.02	0.05386	1.2007	4.84016	0.07491	0.10766	0.27715	1.22375	1.39218
648960.48	4184848.02	648960.48_4184848.02	0.05401	1.14946	4.53996	0.07465	0.10783	0.27913	1.24919	1.40829
648980.48	4184848.02	648980.48_4184848.02	0.05416	1.10344	4.26628	0.07465	0.10808	0.28106	1.2743	1.42026
649000.48	4184848.02	649000.48_4184848.02	0.05424	1.06119	4.02165	0.07484	0.10831	0.28264	1.29564	1.42688
649020.48	4184848.02	649020.48_4184848.02	0.05437	1.0232	3.79734	0.07516	0.10871	0.28442	1.31861	1.42982
649040.48	4184848.02	649040.48_4184848.02	0.05449	0.98806	3.59248	0.07548	0.1092	0.28614	1.34035	1.42834
649060.48	4184848.02	649060.48_4184848.02	0.05462	0.95567	3.4005	0.07568	0.10983	0.28798	1.36257	1.42319
649080.48	4184848.02	649080.48_4184848.02	0.05467	0.92576	3.23385	0.07567	0.1104	0.28942	1.38028	1.41441
648680.48	4184868.02	648680.48_4184868.02	0.0527	3.44967	16.72522	0.08425	0.10608	0.25051	0.94685	0.96343
648700.48	4184868.02	648700.48_4184868.02	0.05277	2.90733	14.24687	0.08427	0.10666	0.2529	0.96859	0.996
648720.48	4184868.02	648720.48_4184868.02	0.05286	2.54328	12.40265	0.08403	0.10719	0.25559	0.99144	1.02939
648740.48	4184868.02	648740.48_4184868.02	0.053	2.27871	10.9724	0.08355	0.1077	0.25855	1.01646	1.06322
648760.48	4184868.02	648760.48_4184868.02	0.05307	2.06342	9.77211	0.08277	0.10801	0.26121	1.04021	1.09588
648780.48	4184868.02	648780.48_4184868.02	0.05317	1.89357	8.79915	0.08178	0.10826	0.26401	1.06675	1.12808
648800.48	4184868.02	648800.48_4184868.02	0.05329	1.75447	7.98826	0.08064	0.10846	0.26682	1.09538	1.15924
648820.48	4184868.02	648820.48_4184868.02	0.05345	1.64006	7.30817	0.07942	0.10866	0.26976	1.12698	1.18951
648840.48	4184868.02	648840.48_4184868.02	0.05357	1.53814	6.70956	0.07811	0.10872	0.27235	1.15672	1.21731
648860.48	4184868.02	648860.48_4184868.02	0.05371	1.44962	6.18955	0.07682	0.10876	0.27488	1.18672	1.24322
648880.48	4184868.02	648880.48_4184868.02	0.05389	1.37274	5.73544	0.07567	0.10886	0.27748	1.21812	1.26755
648900.48	4184868.02	648900.48_4184868.02	0.05401	1.30207	5.32889	0.07465	0.10887	0.27967	1.24595	1.28856
648920.48	4184868.02	648920.48_4184868.02	0.05413	1.23856	4.96529	0.07388	0.1089	0.28173	1.27274	1.30681
648940.48	4184868.02	648940.48_4184868.02	0.05428	1.1828	4.64208	0.07343	0.10902	0.28381	1.30047	1.32225
648960.48	4184868.02	648960.48_4184868.02	0.05444	1.13305	4.351	0.07327	0.10921	0.28582	1.32775	1.33429
648980.48	4184868.02	648980.48_4184868.02	0.05459	1.08839	4.08706	0.07336	0.10949	0.28777	1.35477	1.34242
649000.48	4184868.02	649000.48_4184868.02	0.05468	1.04714	3.85013	0.07359	0.10975	0.28936	1.37768	1.34572
649020.48	4184868.02	649020.48_4184868.02	0.05481	1.01005	3.63501	0.07393	0.11017	0.29115	1.40237	1.34578
649040.48	4184868.02	649040.48_4184868.02	0.05492	0.97577	3.439	0.07423	0.11069	0.29288	1.42575	1.34215
649060.48	4184868.02	649060.48_4184868.02	0.05506	0.94426	3.25679	0.0744	0.11135	0.29475	1.44983	1.33557
648680.48	4184888.02	648680.48_4184888.02	0.05312	3.43042	16.57049	0.08283	0.10746	0.25648	0.99685	0.94184
648700.48	4184888.02	648700.48_4184888.02	0.0532	2.90039	14.1236	0.08274	0.10807	0.2591	1.02188	0.9726
648720.48	4184888.02	648720.48_4184888.02	0.05329	2.5321	12.24763	0.08239	0.1086	0.26188	1.04695	1.00344
648740.48	4184888.02	648740.48_4184888.02	0.05342	2.26385	10.79106	0.0818	0.1091	0.26491	1.07419	1.03428
648760.48	4184888.02	648760.48_4184888.02	0.05348	2.04606	9.5704	0.08093	0.10937	0.2676	1.09994	1.06363
648780.48	4184888.02	648780.48_4184888.02	0.05359	1.87799	8.59876	0.07991	0.10965	0.27056	1.13004	1.09253
648800.48	4184888.02	648800.48_4184888.02	0.05372	1.73977	7.78766	0.07875	0.10986	0.27351	1.16228	1.12012
648820.48	4184888.02	648820.48_4184888.02	0.05389	1.62477	7.10466	0.07754	0.11005	0.27652	1.19709	1.1465
648840.48	4184888.02	648840.48_4184888.02	0.05399	1.52179	6.5023	0.07624	0.11008	0.27909	1.22898	1.17019
648860.48	4184888.02	648860.48_4184888.02	0.05413	1.43329	5.98419	0.075	0.11012	0.28167	1.26181	1.19218
648880.48	4184888.02	648880.48_4184888.02	0.0543	1.35642	5.53453	0.07393	0.1102	0.28426	1.29543	1.2124
648900.48	4184888.02	648900.48_4184888.02	0.05445	1.28709	5.13411	0.07304	0.11026	0.28662	1.32708	1.22991
648920.48	4184888.02	648920.48_4184888.02	0.05457	1.22395	4.77492	0.07237	0.11028	0.28862	1.35511	1.24412
648940.48	4184888.02	648940.48_4184888.02	0.05472	1.16917	4.45862	0.07203	0.11042	0.29072	1.38479	1.25585
648960.48	4184888.02	648960.48_4184888.02	0.05488	1.12052	4.17552	0.07196	0.11063	0.29275	1.41432	1.26444
648980.48	4184888.02	648980.48_4184888.02	0.05503	1.07671	3.92036	0.07212	0.11093	0.2947	1.44316	1.26935
649000.48	4184888.02	649000.48_4184888.02	0.05513	1.03624	3.69046	0.0724	0.11122	0.29634	1.46847	1.27013
649020.48	4184888.02	649020.48_4184888.02	0.05525	0.99964	3.48324	0.07274	0.11168	0.29813	1.49481	1.26789
649040.48	4184888.02	649040.48_4184888.02	0.05537	0.96599	3.29517	0.07302	0.11223	0.2999	1.52032	1.2628
648680.48	4184908.02	648680.48_4184908.02	0.05353	3.44426	16.53179	0.08139	0.10887	0.26267	1.05088	0.92052
648700.48	4184908.02	648700.48_4184908.02	0.05361	2.9034	14.02859	0.08119	0.10947	0.26539	1.07843	0.94899
648720.48	4184908.02	648720.48_4184908.02	0.05371	2.53326	12.13316	0.08074	0.11002	0.26835	1.10689	0.97743
648740.48	4184908.02	648740.48_4184908.02	0.05384	2.26049	10.64784	0.08005	0.11051	0.27149	1.13716	1.00539
648760.48	4184908.02	648760.48_4184908.02	0.0539	2.03968	9.40468	0.07912	0.11078	0.27429	1.16599	1.03163
648780.48	4184908.02	648780.48_4184908.02	0.05402	1.87004	8.4213	0.07807	0.11106	0.27737	1.19966	1.05725
648800.48	4184908.02	648800.48_4184908.02	0.05416	1.73127	7.60534	0.07691	0.11128	0.28045	1.23593	1.08146
648820.48	4184908.02	648820.48_4184908.02	0.05432	1.61452	6.91526	0.0757	0.11146	0.28351	1.27404	1.10422
648840.48	4184908.02	648840.48_4184908.02	0.05443	1.5108	6.31038	0.07444	0.11149	0.28614	1.30918	1.12432
648860.48	4184908.02	648860.48_4184908.02	0.05457	1.42198	5.79317	0.07328	0.11153	0.28878	1.34526	1.14284
648880.48	4184908.02	648880.48_4184908.02	0.05474	1.34471	5.34518	0.07229	0.11161	0.29138	1.38157	1.15941
648900.48	4184908.02	648900.48_4184908.02	0.05491	1.27601	4.94945	0.07151	0.1117	0.29385	1.41677	1.17368
648920.48	4184908.02	648920.48_4184908.02	0.05501	1.21346	4.59592	0.07095	0.11172	0.29583	1.44663	1.18453
648940.48	4184908.02	648940.48_4184908.02	0.05516	1.15921	4.28541	0.0707	0.11187	0.29791	1.47834	1.19302
648960.48	4184908.02	648960.48_4184908.02	0.05532	1.11119	4.00945	0.07072	0.1121	0.29995	1.51016	1.19867
648980.48	4184908.02	648980.48_4184908.02	0.05547	1.06783	3.76202	0.07094	0.11241	0.30189	1.54121	1.20094
649000.48	4184908.02	649000.48_4184908.02	0.05557	1.02756	3.53876	0.07124	0.11273	0.30351	1.56809	1.19954
649020.48	4184908.02	649020.48_4184908.02	0.05571	0.99157	3.33975	0.07159	0.11323	0.30538	1.59754	1.19588
648680.48	4184928.02	648680.48_4184928.02	0.05396	3.49544	16.61122	0.07995	0.11031	0.26915	1.10976	0.89936
648700.48	4184928.02	648700.48_4184928.02	0.05404	2.92912	14.00854	0.07963	0.1109	0.27199	1.14048	0.92553
648720.48	4184928.02	648720.48_4184928.02	0.05415	2.5488	12.06313	0.07909	0.11148	0.27514	1.173	0.95149
648740.48	4184928.02	648740.48_4184928.02	0.05428	2.26669	10.52843	0.07834	0.11196	0.27837	1.20672	0.97659
648760.48	4184928.02	648760.48_4184928.02	0.05434	2.04152	9.25861	0.07736	0.11223	0.2813	1.23941	0.99991
648780.48	4184928.02	648780.48_4184928.02	0.05446	1.86796	8.25433	0.07627	0.11251	0.28447	1.27681	1.02231
648800.48	4184928.02	648800.48_4184928.02	0.0546	1.72683	7.42723	0.07512	0.11273	0.28766	1.31717	1.04336
648820.48	4184928.02	648820.48_4184928.02	0.05476	1.60799	6.72964	0.07393	0.1129	0.29078	1.35909	1.06275
648840.48	4184928.02	648840.48_4184928.02	0.05487	1.50313	6.12168	0.07272	0.11292	0.29346	1.39773	1.07968
648860.48	4184928.02	648860.48_4184928.02	0.05502	1.41386	5.60582	0.07163	0.11298	0.29617	1.43754	1.09507
648880.48	4184928.02	648880.48_4184928.02	0.05518	1.33626	5.16019	0.07073	0.11306	0.29879	1.47705	1.10849
648900.48	4184928.02	648900.48_4184928.02	0.05536	1.26773	4.76884	0.07005	0.11316	0.30129	1.51534	1.11974
648920.48	4184928.02	648920.48_4184928.02	0.05547	1.20591	4.42203	0.0696	0.1132	0.3033	1.54802	1.12777
648940.48	4184928.02	648940.48_4184928.02	0.05562	1.15203	4.1179	0.06945	0.11335	0.30537	1.58205	1.13361
648960.48	4184928.02	648960.48_4184928.02	0.05578	1.10443	3.84948	0.06955	0.11361	0.30743	1.61677	1.13678
648980.48	4184928.02	648980.48_4184928.02	0.05593	1.06131	3.60967	0.06981	0.11395	0.3094	1.65057	1.13714

649000.48	4184928.02	649000.48_4184928.02	0.05603	1.02128	3.39422	0.07013	0.1143	0.31105	1.67999	1.13414
649020.48	4184928.02	649020.48_4184928.02	0.05618	0.98542	3.20252	0.07047	0.11483	0.31295	1.71219	1.12938
648680.48	4184948.02	648680.48_4184948.02	0.05441	3.5784	16.78011	0.0785	0.1118	0.27599	1.17457	0.87828
648700.48	4184948.02	648700.48_4184948.02	0.05448	2.97263	14.03683	0.07808	0.1124	0.27894	1.20907	0.90214
648720.48	4184948.02	648720.48_4184948.02	0.05458	2.56806	11.98185	0.07745	0.11294	0.28212	1.24485	0.92538
648740.48	4184948.02	648740.48_4184948.02	0.05472	2.2785	10.40985	0.07664	0.11344	0.28557	1.28381	0.94786
648760.48	4184948.02	648760.48_4184948.02	0.05479	2.04939	9.11746	0.07564	0.11374	0.28868	1.32151	0.96847
648780.48	4184948.02	648780.48_4184948.02	0.05491	1.86983	8.08415	0.07453	0.11399	0.29189	1.36269	0.98783
648800.48	4184948.02	648800.48_4184948.02	0.05505	1.72521	7.2427	0.07339	0.1142	0.29515	1.40729	1.00587
648820.48	4184948.02	648820.48_4184948.02	0.05521	1.60405	6.5382	0.07222	0.11437	0.29834	1.4535	1.02224
648840.48	4184948.02	648840.48_4184948.02	0.05532	1.49781	5.92799	0.07106	0.11439	0.30105	1.49584	1.03632
648860.48	4184948.02	648860.48_4184948.02	0.05548	1.40815	5.41537	0.07006	0.11446	0.30384	1.53989	1.0489
648880.48	4184948.02	648880.48_4184948.02	0.05564	1.33025	4.97374	0.06925	0.11454	0.30648	1.58297	1.05963
648900.48	4184948.02	648900.48_4184948.02	0.05581	1.26181	4.58863	0.06867	0.11464	0.30896	1.62423	1.06814
648920.48	4184948.02	648920.48_4184948.02	0.05593	1.20053	4.24903	0.06833	0.1147	0.31102	1.66033	1.07388
648940.48	4184948.02	648940.48_4184948.02	0.05609	1.14732	3.95391	0.06827	0.11489	0.31317	1.69843	1.07759
648960.48	4184948.02	648960.48_4184948.02	0.05626	1.09978	3.69321	0.06843	0.11518	0.31525	1.73633	1.07884
648980.48	4184948.02	648980.48_4184948.02	0.0564	1.05656	3.46107	0.06873	0.11553	0.31719	1.77261	1.0775
649000.48	4184948.02	649000.48_4184948.02	0.05651	1.01669	3.25415	0.06906	0.11591	0.31888	1.80512	1.07341
649020.48	4184948.02	649020.48_4184948.02	0.05665	0.9807	3.06981	0.06938	0.11648	0.3208	1.83999	1.06788
648680.48	4184968.02	648680.48_4184968.02	0.05487	3.67116	16.97135	0.07706	0.11334	0.28318	1.24607	0.85721
648700.48	4184968.02	648700.48_4184968.02	0.05496	3.02585	14.08666	0.07656	0.11396	0.28634	1.28578	0.87885
648720.48	4184968.02	648720.48_4184968.02	0.05505	2.5973	11.91951	0.07585	0.1145	0.28961	1.32618	0.89954
648740.48	4184968.02	648740.48_4184968.02	0.05516	2.29186	10.26585	0.07498	0.11495	0.29306	1.36908	0.91916
648760.48	4184968.02	648760.48_4184968.02	0.05526	2.05892	8.95616	0.07396	0.11529	0.2964	1.4131	0.93731
648780.48	4184968.02	648780.48_4184968.02	0.05539	1.87536	7.90531	0.07286	0.11555	0.29975	1.45986	0.95402
648800.48	4184968.02	648800.48_4184968.02	0.05552	1.72619	7.04673	0.07172	0.11574	0.30305	1.50887	0.96923
648820.48	4184968.02	648820.48_4184968.02	0.05567	1.60164	6.3318	0.07057	0.11587	0.3062	1.55859	0.98279
648840.48	4184968.02	648840.48_4184968.02	0.0558	1.49551	5.72902	0.0695	0.11593	0.30909	1.60684	0.99451
648860.48	4184968.02	648860.48_4184968.02	0.05595	1.40463	5.21802	0.06857	0.11598	0.31184	1.6544	1.00456
648880.48	4184968.02	648880.48_4184968.02	0.0561	1.32626	4.78183	0.06784	0.11605	0.31447	1.70099	1.01277
648900.48	4184968.02	648900.48_4184968.02	0.05627	1.2579	4.405	0.06736	0.11615	0.31694	1.74583	1.01904
648920.48	4184968.02	648920.48_4184968.02	0.05642	1.19761	4.0769	0.06713	0.11628	0.31917	1.78788	1.02303
648940.48	4184968.02	648940.48_4184968.02	0.05658	1.14427	3.79014	0.06715	0.11649	0.3213	1.82904	1.02484
648960.48	4184968.02	648960.48_4184968.02	0.05673	1.09645	3.5379	0.06735	0.11677	0.32331	1.86933	1.02444
648980.48	4184968.02	648980.48_4184968.02	0.05688	1.05316	3.31469	0.06768	0.11715	0.32529	1.90932	1.02186
649000.48	4184968.02	649000.48_4184968.02	0.05702	1.01355	3.11651	0.06803	0.11763	0.32719	1.94777	1.01734
648680.48	4184988.02	648680.48_4184988.02	0.0553	3.73441	16.96852	0.07559	0.11485	0.29048	1.32251	0.83562
648700.48	4184988.02	648700.48_4184988.02	0.05539	3.05767	13.98122	0.075	0.11548	0.29377	1.36745	0.855
648720.48	4184988.02	648720.48_4184988.02	0.05548	2.61452	11.75104	0.07424	0.11601	0.29718	1.4136	0.87328
648740.48	4184988.02	648740.48_4184988.02	0.05559	2.30127	10.05976	0.07333	0.11646	0.30072	1.46218	0.8904
648760.48	4184988.02	648760.48_4184988.02	0.05571	2.06442	8.73497	0.0723	0.11681	0.30424	1.51296	0.90611
648780.48	4184988.02	648780.48_4184988.02	0.05583	1.87754	7.67522	0.07121	0.11707	0.30771	1.56567	0.92037
648800.48	4184988.02	648800.48_4184988.02	0.05598	1.7262	6.8162	0.07008	0.11727	0.31112	1.62058	0.9332
648820.48	4184988.02	648820.48_4184988.02	0.05613	1.60008	6.10404	0.06899	0.1174	0.31436	1.67575	0.94443
648840.48	4184988.02	648840.48_4184988.02	0.05626	1.49295	5.50728	0.06798	0.11745	0.31728	1.72857	0.95388
648860.48	4184988.02	648860.48_4184988.02	0.0564	1.40181	5.00556	0.06713	0.11751	0.32006	1.78083	0.96173
648880.48	4184988.02	648880.48_4184988.02	0.05656	1.32335	4.57949	0.06649	0.11758	0.32267	1.8315	0.96789
648900.48	4184988.02	648900.48_4184988.02	0.05672	1.25515	4.21441	0.0661	0.11768	0.32512	1.88038	0.9722
648920.48	4184988.02	648920.48_4184988.02	0.05688	1.1952	3.8987	0.06597	0.11784	0.3274	1.92737	0.97456
648940.48	4184988.02	648940.48_4184988.02	0.05704	1.14183	3.6233	0.06606	0.11806	0.32952	1.97236	0.9749
648960.48	4184988.02	648960.48_4184988.02	0.0572	1.09413	3.38283	0.06632	0.11839	0.33163	2.01789	0.97337
648980.48	4184988.02	648980.48_4184988.02	0.05735	1.05063	3.17003	0.06666	0.1188	0.3336	2.06147	0.96994
649000.48	4184988.02	649000.48_4184988.02	0.05747	1.01053	2.98088	0.067	0.11927	0.33541	2.10168	0.96462
648680.48	4185008.02	648680.48_4185008.02	0.05574	3.76831	16.81067	0.07412	0.11639	0.29807	1.40641	0.81384
648700.48	4185008.02	648700.48_4185008.02	0.05582	3.0742	13.75791	0.07346	0.11702	0.30149	1.45726	0.83099
648720.48	4185008.02	648720.48_4185008.02	0.05591	2.62371	11.49175	0.07265	0.11755	0.30504	1.51007	0.84701
648740.48	4185008.02	648740.48_4185008.02	0.05602	2.30565	9.7792	0.0717	0.11799	0.30869	1.56557	0.86177
648760.48	4185008.02	648760.48_4185008.02	0.05614	2.06606	8.44933	0.07067	0.11834	0.31233	1.62341	0.87522
648780.48	4185008.02	648780.48_4185008.02	0.05627	1.87736	7.39327	0.06959	0.1186	0.31591	1.68284	0.88724
648800.48	4185008.02	648800.48_4185008.02	0.05643	1.72531	6.54583	0.0685	0.1188	0.31945	1.74457	0.89797
648820.48	4185008.02	648820.48_4185008.02	0.05658	1.59879	5.84927	0.06746	0.11896	0.32279	1.80633	0.9072
648840.48	4185008.02	648840.48_4185008.02	0.0567	1.49044	5.26167	0.06651	0.11898	0.32568	1.86329	0.91455
648860.48	4185008.02	648860.48_4185008.02	0.05684	1.39866	4.77239	0.06573	0.11902	0.3284	1.91944	0.92041
648880.48	4185008.02	648880.48_4185008.02	0.057	1.32077	4.36363	0.06519	0.1191	0.33106	1.97587	0.92488
648900.48	4185008.02	648900.48_4185008.02	0.05717	1.25308	4.01521	0.06491	0.11923	0.33355	2.03052	0.92767
648920.48	4185008.02	648920.48_4185008.02	0.05733	1.19331	3.71445	0.06485	0.11941	0.33586	2.08269	0.92867
648940.48	4185008.02	648940.48_4185008.02	0.0575	1.14005	3.45332	0.06501	0.11966	0.33803	2.13321	0.92788
648960.48	4185008.02	648960.48_4185008.02	0.05769	1.09264	3.22701	0.06533	0.12006	0.34029	2.186	0.9257
648980.48	4185008.02	648980.48_4185008.02	0.05784	1.04883	3.02519	0.06568	0.12051	0.34233	2.23461	0.92165
649000.48	4185008.02	649000.48_4185008.02	0.05795	1.00813	2.84561	0.06599	0.121	0.34411	2.27743	0.91588
648680.48	4185028.02	648680.48_4185028.02	0.05619	3.78404	16.52359	0.07265	0.11799	0.30608	1.50015	0.79204
648700.48	4185028.02	648700.48_4185028.02	0.05628	3.08565	13.44383	0.07195	0.11863	0.3097	1.55854	0.80715
648720.48	4185028.02	648720.48_4185028.02	0.05641	2.63808	11.19419	0.07112	0.11921	0.31359	1.62193	0.82128
648740.48	4185028.02	648740.48_4185028.02	0.0565	2.31239	9.44942	0.07014	0.11962	0.31724	1.68447	0.8338
648760.48	4185028.02	648760.48_4185028.02	0.0566	2.0675	8.10938	0.0691	0.11994	0.32089	1.74892	0.845
648780.48	4185028.02	648780.48_4185028.02	0.05673	1.87779	7.06947	0.06803	0.1202	0.32458	1.81647	0.85506
648800.48	4185028.02	648800.48_4185028.02	0.05689	1.72478	6.24005	0.06698	0.1204	0.32819	1.88523	0.86385
648820.48	4185028.02	648820.48_4185028.02	0.05705	1.59779	5.56423	0.066	0.12054	0.33158	1.9534	0.87124
648840.48	4185028.02	648840.48_4185028.02	0.05717	1.48967	4.99971	0.06512	0.12058	0.33453	2.01694	0.87696
648860.48	4185028.02	648860.48_4185028.02	0.05732	1.39872	4.53465	0.06444	0.12065	0.33737	2.08074	0.88138
648880.48	4185028.02	648880.48_4185028.02	0.05749	1.3211	4.14626	0.064	0.12075	0.34008	2.1443	0.88445
648900.48	4185028.02	648900.48_4185028.02	0.05766	1.25326	3.8153	0.0638	0.12089	0.34258	2.20512	0.88592
648920.48	4185028.02	648920.48_4185028.02	0.05784	1.19362	3.53203	0.06383	0.12111	0.34497	2.2648	0.88592
648940.48	4185028.02	648940.48_4185028.02	0.058	1.13994	3.28512	0.06404	0.12139	0.34715	2.32085	0.88422
648960.48	4185028.02	648960.48_4185028.02	0.05818	1.09167	3.0703	0.06437	0.12179	0.34935	2.37751	0.88118

648980.48	4185028.02	648980.48_4185028.02	0.05835	1.04738	2.87993	0.06473	0.1223	0.3515	2.43235	0.87676
648680.48	4185048.02	648680.48_4185048.02	0.05666	3.78776	16.08544	0.07122	0.11964	0.31451	1.60529	0.7702
648700.48	4185048.02	648700.48_4185048.02	0.05675	3.08751	12.9818	0.07046	0.12027	0.31827	1.67174	0.78332
648720.48	4185048.02	648720.48_4185048.02	0.05688	2.6401	10.74125	0.0696	0.12087	0.32234	1.74509	0.79552
648740.48	4185048.02	648740.48_4185048.02	0.05698	2.31431	9.01782	0.06862	0.12128	0.32615	1.81789	0.80617
648760.48	4185048.02	648760.48_4185048.02	0.05707	2.06637	7.69362	0.06757	0.12157	0.32981	1.89032	0.81539
648780.48	4185048.02	648780.48_4185048.02	0.05721	1.87699	6.68971	0.06653	0.12184	0.33364	1.96747	0.82373
648800.48	4185048.02	648800.48_4185048.02	0.05738	1.72439	5.89654	0.06553	0.12205	0.33736	2.04529	0.8309
648820.48	4185048.02	648820.48_4185048.02	0.05753	1.5976	5.25314	0.06461	0.12219	0.34081	2.12126	0.83674
648840.48	4185048.02	648840.48_4185048.02	0.05766	1.49002	4.71966	0.06381	0.12223	0.34379	2.19207	0.84101
648860.48	4185048.02	648860.48_4185048.02	0.05781	1.39929	4.28201	0.06321	0.12231	0.34666	2.26332	0.84411
648880.48	4185048.02	648880.48_4185048.02	0.05799	1.3219	3.91869	0.06287	0.12243	0.34943	2.33537	0.84601
648900.48	4185048.02	648900.48_4185048.02	0.05817	1.25412	3.60988	0.06275	0.12261	0.35201	2.40492	0.8465
648920.48	4185048.02	648920.48_4185048.02	0.05835	1.194	3.34457	0.06285	0.12285	0.35442	2.47168	0.8456
648940.48	4185048.02	648940.48_4185048.02	0.05853	1.14	3.11384	0.0631	0.12318	0.3567	2.53583	0.84328
648960.48	4185048.02	648960.48_4185048.02	0.0587	1.09086	2.91225	0.06345	0.12359	0.35885	2.59689	0.83964
648980.48	4185048.02	648980.48_4185048.02	0.05886	1.0458	2.73448	0.0638	0.12413	0.36102	2.65706	0.83486
648680.48	4185068.02	648680.48_4185068.02	0.05714	3.78122	15.45197	0.0698	0.12133	0.32336	1.72355	0.74834
648700.48	4185068.02	648700.48_4185068.02	0.05722	3.08303	12.34981	0.069	0.12195	0.32723	1.79912	0.75961
648720.48	4185068.02	648720.48_4185068.02	0.05735	2.63508	10.13103	0.06811	0.12253	0.33137	1.88252	0.76994
648740.48	4185068.02	648740.48_4185068.02	0.05747	2.31249	8.4769	0.06714	0.12298	0.33545	1.96855	0.77899
648760.48	4185068.02	648760.48_4185068.02	0.05756	2.06613	7.21263	0.0661	0.12327	0.33926	2.0528	0.78666
648780.48	4185068.02	648780.48_4185068.02	0.0577	1.87641	6.25936	0.06509	0.12354	0.34315	2.14005	0.7934
648800.48	4185068.02	648800.48_4185068.02	0.05787	1.72397	5.51511	0.06413	0.12374	0.34694	2.2276	0.7991
648820.48	4185068.02	648820.48_4185068.02	0.05803	1.598	4.91543	0.06327	0.12389	0.35048	2.31341	0.8036
648840.48	4185068.02	648840.48_4185068.02	0.05818	1.4919	4.42645	0.06257	0.12398	0.35363	2.39554	0.80684
648860.48	4185068.02	648860.48_4185068.02	0.05835	1.40174	4.02314	0.06207	0.12408	0.35661	2.47776	0.8089
648880.48	4185068.02	648880.48_4185068.02	0.05853	1.32379	3.68532	0.0618	0.12422	0.35939	2.55867	0.80977
648900.48	4185068.02	648900.48_4185068.02	0.0587	1.25536	3.39857	0.06176	0.1244	0.36194	2.63613	0.80933
648920.48	4185068.02	648920.48_4185068.02	0.05887	1.19448	3.15264	0.06191	0.12464	0.36428	2.70933	0.80763
648940.48	4185068.02	648940.48_4185068.02	0.05904	1.13962	2.93974	0.0622	0.12497	0.36648	2.77841	0.80474
648960.48	4185068.02	648960.48_4185068.02	0.05918	1.08947	2.75366	0.06255	0.12538	0.36853	2.84296	0.80066
648980.48	4185068.02	648980.48_4185068.02	0.05934	1.04353	2.58986	0.06289	0.12592	0.37063	2.90652	0.79569
648680.48	4185088.02	648680.48_4185088.02	0.05764	3.77118	14.60007	0.0684	0.12308	0.33271	1.85859	0.72664
648700.48	4185088.02	648700.48_4185088.02	0.05773	3.08028	11.5459	0.06758	0.12371	0.33676	1.94588	0.73625
648720.48	4185088.02	648720.48_4185088.02	0.05784	2.62964	9.38541	0.06667	0.12427	0.34095	2.04045	0.74484
648740.48	4185088.02	648740.48_4185088.02	0.05796	2.30875	7.82542	0.0657	0.12472	0.34518	2.14002	0.75239
648760.48	4185088.02	648760.48_4185088.02	0.05808	2.0658	6.66299	0.06469	0.12504	0.34922	2.2393	0.75875
648780.48	4185088.02	648780.48_4185088.02	0.05822	1.87624	5.78349	0.0637	0.1253	0.35316	2.33839	0.76411
648800.48	4185088.02	648800.48_4185088.02	0.05837	1.72391	5.09972	0.06279	0.12548	0.35694	2.43598	0.76847
648820.48	4185088.02	648820.48_4185088.02	0.05853	1.59861	4.55563	0.062	0.12561	0.36047	2.53196	0.77178
648840.48	4185088.02	648840.48_4185088.02	0.05867	1.49274	4.11221	0.06137	0.12569	0.36359	2.62313	0.77392
648860.48	4185088.02	648860.48_4185088.02	0.05883	1.40237	3.74591	0.06095	0.12578	0.36651	2.71397	0.77499
648880.48	4185088.02	648880.48_4185088.02	0.05899	1.32399	3.43939	0.06076	0.1259	0.36921	2.80305	0.77495
648900.48	4185088.02	648900.48_4185088.02	0.05917	1.25526	3.17999	0.06079	0.1261	0.37176	2.89016	0.77385
648920.48	4185088.02	648920.48_4185088.02	0.05934	1.19398	2.9573	0.06099	0.12638	0.37418	2.97356	0.77166
648940.48	4185088.02	648940.48_4185088.02	0.05953	1.13857	2.76421	0.06131	0.12677	0.3765	3.05335	0.76848
648960.48	4185088.02	648960.48_4185088.02	0.05968	1.08761	2.59421	0.06167	0.12723	0.37866	3.12625	0.76422
648980.48	4185088.02	648980.48_4185088.02	0.05984	1.04089	2.44451	0.06199	0.12781	0.38082	3.19591	0.75917
648680.48	4185108.02	648680.48_4185108.02	0.05813	3.73949	13.33572	0.067	0.12482	0.34232	2.00944	0.70486
648700.48	4185108.02	648700.48_4185108.02	0.05821	3.06222	10.44207	0.06616	0.12546	0.34652	2.10975	0.71295
648720.48	4185108.02	648720.48_4185108.02	0.05831	2.61624	8.44542	0.06523	0.12598	0.35076	2.21706	0.72002
648740.48	4185108.02	648740.48_4185108.02	0.05842	2.29925	7.04373	0.06427	0.12642	0.35503	2.33014	0.72614
648760.48	4185108.02	648760.48_4185108.02	0.05854	2.05931	6.01671	0.06328	0.12674	0.35916	2.44338	0.73123
648780.48	4185108.02	648780.48_4185108.02	0.05868	1.87239	5.24673	0.06233	0.12698	0.36318	2.55645	0.73544
648800.48	4185108.02	648800.48_4185108.02	0.05884	1.72284	4.65314	0.06148	0.12718	0.36708	2.66933	0.7388
648820.48	4185108.02	648820.48_4185108.02	0.05902	1.59939	4.18015	0.06077	0.12734	0.37077	2.78108	0.74127
648840.48	4185108.02	648840.48_4185108.02	0.05916	1.49373	3.78747	0.06022	0.12743	0.37393	2.88466	0.74253
648860.48	4185108.02	648860.48_4185108.02	0.05933	1.40358	3.4648	0.05989	0.12754	0.37693	2.98942	0.7429
648880.48	4185108.02	648880.48_4185108.02	0.0595	1.32506	3.19342	0.05978	0.1277	0.3797	3.092	0.74225
648900.48	4185108.02	648900.48_4185108.02	0.05968	1.25565	2.96195	0.05987	0.12792	0.38227	3.19061	0.74062
648920.48	4185108.02	648920.48_4185108.02	0.05986	1.19357	2.76297	0.06012	0.12824	0.38474	3.28549	0.73807
648940.48	4185108.02	648940.48_4185108.02	0.06004	1.13707	2.58929	0.06046	0.12865	0.38708	3.37394	0.73459
648960.48	4185108.02	648960.48_4185108.02	0.06021	1.08535	2.43656	0.06082	0.12916	0.38934	3.4563	0.73029
648980.48	4185108.02	648980.48_4185108.02	0.06036	1.03786	2.30105	0.06112	0.12978	0.39155	3.53163	0.72523
648680.48	4185128.02	648680.48_4185128.02	0.05861	3.69294	11.61016	0.06563	0.12658	0.35229	2.18083	0.68321
648700.48	4185128.02	648700.48_4185128.02	0.0587	3.03849	9.07571	0.06477	0.12724	0.35667	2.29703	0.68999
648720.48	4185128.02	648720.48_4185128.02	0.05879	2.60424	7.38131	0.06384	0.12776	0.36107	2.42134	0.69581
648740.48	4185128.02	648740.48_4185128.02	0.05891	2.29356	6.20749	0.06289	0.1282	0.3655	2.55181	0.70077
648760.48	4185128.02	648760.48_4185128.02	0.05904	2.05841	5.35397	0.06194	0.12854	0.36982	2.68417	0.70488
648780.48	4185128.02	648780.48_4185128.02	0.05919	1.87402	4.70927	0.06105	0.1288	0.37399	2.81607	0.70816
648800.48	4185128.02	648800.48_4185128.02	0.05935	1.72521	4.20595	0.06026	0.129	0.37796	2.94626	0.71064
648820.48	4185128.02	648820.48_4185128.02	0.05953	1.60174	3.80097	0.05961	0.12916	0.38167	3.07409	0.71227
648840.48	4185128.02	648840.48_4185128.02	0.05968	1.49615	3.46476	0.05915	0.12926	0.3849	3.19409	0.71284
648860.48	4185128.02	648860.48_4185128.02	0.05986	1.40559	3.18577	0.0589	0.12939	0.38793	3.31434	0.7126
648880.48	4185128.02	648880.48_4185128.02	0.06003	1.32639	2.9496	0.05886	0.12957	0.39075	3.43211	0.71146
648900.48	4185128.02	648900.48_4185128.02	0.06021	1.25599	2.74691	0.05901	0.12982	0.39337	3.54485	0.70945
648920.48	4185128.02	648920.48_4185128.02	0.0604	1.19268	2.57148	0.05929	0.13017	0.39589	3.65242	0.70663
648940.48	4185128.02	648940.48_4185128.02	0.06059	1.13526	2.41785	0.05965	0.13065	0.39838	3.75457	0.70308
648960.48	4185128.02	648960.48_4185128.02	0.06076	1.08258	2.28179	0.06	0.13119	0.40065	3.84377	0.69871
648980.48	4185128.02	648980.48_4185128.02	0.0609	1.03426	2.16025	0.06027	0.13183	0.40285	3.92259	0.69361
648680.48	4185148.02	648680.48_4185148.02	0.05912	3.65731	9.51124	0.06429	0.12843	0.36293	2.38221	0.66204
648700.48	4185148.02	648700.48_4185148.02	0.05921	3.02441	7.56072	0.06343	0.12909	0.36749	2.51774	0.66764
648720.48	4185148.02	648720.48_4185148.02	0.05932	2.60189	6.2704	0.06251	0.12964	0.37212	2.66363	0.67242
648740.48	4185148.02	648740.48_4185148.02	0.05944	2.29555	5.36155	0.06158	0.13008	0.37669	2.81491	0.67639
648760.48	4185148.02	648760.48_4185148.02	0.05958	2.06215	4.68959	0.06067	0.13042	0.38114	2.96813	0.6796

648780.48	4185148.02	648780.48_4185148.02	0.05973	1.87827	4.17248	0.05982	0.13068	0.3854	3.1209	0.68206
648800.48	4185148.02	648800.48_4185148.02	0.05989	1.72928	3.76116	0.05908	0.13089	0.38943	3.27211	0.68374
648820.48	4185148.02	648820.48_4185148.02	0.06007	1.60528	3.42609	0.05851	0.13105	0.39319	3.421	0.68464
648840.48	4185148.02	648840.48_4185148.02	0.06024	1.49956	3.14722	0.05813	0.13119	0.39657	3.56419	0.68474
648860.48	4185148.02	648860.48_4185148.02	0.06042	1.40806	2.91182	0.05796	0.13134	0.39966	3.70364	0.684
648880.48	4185148.02	648880.48_4185148.02	0.0606	1.32755	2.71033	0.05799	0.13155	0.4025	3.83844	0.68251
648900.48	4185148.02	648900.48_4185148.02	0.06078	1.25561	2.53588	0.05818	0.13181	0.40511	3.96538	0.68018
648920.48	4185148.02	648920.48_4185148.02	0.06095	1.19076	2.38338	0.05849	0.13217	0.40756	4.08324	0.6771
648940.48	4185148.02	648940.48_4185148.02	0.06114	1.13216	2.24902	0.05885	0.13267	0.41007	4.19551	0.6734
648960.48	4185148.02	648960.48_4185148.02	0.06133	1.07883	2.12955	0.05919	0.13329	0.41257	4.29892	0.66911
648980.48	4185148.02	648980.48_4185148.02	0.06146	1.0297	2.02253	0.05943	0.13394	0.4147	4.37797	0.66406
648680.48	4185168.02	648680.48_4185168.02	0.05964	3.63873	7.25236	0.06299	0.13034	0.37415	2.61912	0.64129
648700.48	4185168.02	648700.48_4185168.02	0.05975	3.02463	6.03544	0.06213	0.13103	0.37899	2.77987	0.64592
648720.48	4185168.02	648720.48_4185168.02	0.05987	2.60743	5.1745	0.06122	0.13159	0.38382	2.95074	0.64979
648740.48	4185168.02	648740.48_4185168.02	0.06	2.30201	4.53422	0.06031	0.13204	0.38854	3.12615	0.65289
648760.48	4185168.02	648760.48_4185168.02	0.06014	2.06842	4.04083	0.05943	0.13237	0.39308	3.30335	0.65526
648780.48	4185168.02	648780.48_4185168.02	0.06028	1.88389	3.64842	0.05863	0.13262	0.39739	3.48023	0.65696
648800.48	4185168.02	648800.48_4185168.02	0.06044	1.73381	3.3285	0.05796	0.13281	0.40139	3.65491	0.65798
648820.48	4185168.02	648820.48_4185168.02	0.0606	1.60861	3.06254	0.05745	0.13296	0.4051	3.82676	0.65831
648840.48	4185168.02	648840.48_4185168.02	0.06076	1.50149	2.83715	0.05715	0.13308	0.40836	3.98889	0.6579
648860.48	4185168.02	648860.48_4185168.02	0.06093	1.40853	2.64409	0.05705	0.13323	0.41142	4.14758	0.65675
648880.48	4185168.02	648880.48_4185168.02	0.0611	1.32627	2.47598	0.05714	0.13344	0.41421	4.29828	0.65485
648900.48	4185168.02	648900.48_4185168.02	0.06128	1.25286	2.32891	0.05737	0.13374	0.41686	4.44219	0.65227
648920.48	4185168.02	648920.48_4185168.02	0.06146	1.18687	2.19918	0.0577	0.13414	0.4194	4.5762	0.64908
648940.48	4185168.02	648940.48_4185168.02	0.06168	1.12775	2.08521	0.05807	0.13472	0.42218	4.70942	0.64551
648960.48	4185168.02	648960.48_4185168.02	0.06187	1.07367	1.98186	0.0584	0.13541	0.42484	4.82475	0.64129
648980.48	4185168.02	648980.48_4185168.02	0.06202	1.02401	1.88869	0.05861	0.13612	0.42715	4.911	0.63639
648680.48	4185188.02	648680.48_4185188.02	0.06019	3.64776	5.23572	0.06172	0.13231	0.386	2.90001	0.62101
648700.48	4185188.02	648700.48_4185188.02	0.06028	3.032	4.63797	0.06085	0.13297	0.39085	3.08515	0.62464
648720.48	4185188.02	648720.48_4185188.02	0.06038	2.61234	4.15094	0.05995	0.1335	0.39568	3.28041	0.6276
648740.48	4185188.02	648740.48_4185188.02	0.06049	2.30576	3.75339	0.05906	0.13391	0.40041	3.48021	0.62991
648760.48	4185188.02	648760.48_4185188.02	0.06063	2.07214	3.42583	0.05822	0.13424	0.40499	3.6832	0.63164
648780.48	4185188.02	648780.48_4185188.02	0.06078	1.88768	3.15202	0.05748	0.13449	0.40937	3.88932	0.63277
648800.48	4185188.02	648800.48_4185188.02	0.06094	1.73716	2.91915	0.05688	0.13469	0.41348	4.09619	0.63333
648820.48	4185188.02	648820.48_4185188.02	0.06114	1.61159	2.71927	0.05646	0.13491	0.4175	4.30786	0.63327
648840.48	4185188.02	648840.48_4185188.02	0.06129	1.50257	2.54326	0.05623	0.13501	0.42071	4.49466	0.63244
648860.48	4185188.02	648860.48_4185188.02	0.06146	1.40779	2.38917	0.05619	0.13519	0.42381	4.67871	0.63099
648880.48	4185188.02	648880.48_4185188.02	0.06165	1.32409	2.25334	0.05633	0.13545	0.42674	4.85571	0.6289
648900.48	4185188.02	648900.48_4185188.02	0.06183	1.24943	2.13249	0.05661	0.13579	0.4295	5.02237	0.62623
648920.48	4185188.02	648920.48_4185188.02	0.06203	1.18248	2.02464	0.05695	0.13626	0.43221	5.17835	0.62303
648940.48	4185188.02	648940.48_4185188.02	0.06225	1.12225	1.92766	0.05732	0.1369	0.43514	5.32917	0.61943
648960.48	4185188.02	648960.48_4185188.02	0.06244	1.06727	1.83951	0.05762	0.13759	0.43775	5.44767	0.61521
648980.48	4185188.02	648980.48_4185188.02	0.06258	1.01727	1.75942	0.0578	0.13836	0.44019	5.53777	0.61044
648680.48	4185208.02	648680.48_4185208.02	0.06069	3.66955	3.75559	0.06045	0.13423	0.39799	3.22466	0.60093
648700.48	4185208.02	648700.48_4185208.02	0.06078	3.04642	3.529	0.05959	0.1349	0.40303	3.44279	0.60381
648720.48	4185208.02	648720.48_4185208.02	0.06089	2.62103	3.29949	0.0587	0.13543	0.40801	3.6702	0.60608
648740.48	4185208.02	648740.48_4185208.02	0.06102	2.31346	3.08572	0.05785	0.13586	0.41298	3.90613	0.60787
648760.48	4185208.02	648760.48_4185208.02	0.06116	2.07924	2.88873	0.05706	0.13621	0.41773	4.14617	0.60909
648780.48	4185208.02	648780.48_4185208.02	0.06131	1.89346	2.70969	0.05638	0.13647	0.42221	4.38959	0.60976
648800.48	4185208.02	648800.48_4185208.02	0.06147	1.74092	2.54754	0.05585	0.13666	0.42635	4.63249	0.60986
648820.48	4185208.02	648820.48_4185208.02	0.06168	1.61342	2.40315	0.0555	0.1369	0.43045	4.88464	0.60949
648840.48	4185208.02	648840.48_4185208.02	0.06185	1.50254	2.27114	0.05535	0.13705	0.43385	5.11118	0.60842
648860.48	4185208.02	648860.48_4185208.02	0.06203	1.40572	2.15217	0.05538	0.13726	0.437	5.3265	0.60673
648880.48	4185208.02	648880.48_4185208.02	0.06222	1.32047	2.04482	0.05557	0.13756	0.44005	5.53389	0.60454
648900.48	4185208.02	648900.48_4185208.02	0.06242	1.24452	1.94735	0.05587	0.13795	0.44292	5.72651	0.60179
648920.48	4185208.02	648920.48_4185208.02	0.06262	1.17646	1.85866	0.05623	0.13847	0.44577	5.90514	0.59859
648940.48	4185208.02	648940.48_4185208.02	0.06284	1.11517	1.77696	0.05657	0.13914	0.44873	6.06899	0.59486
648960.48	4185208.02	648960.48_4185208.02	0.06301	1.05978	1.70338	0.05685	0.13987	0.4514	6.19293	0.59071
648980.48	4185208.02	648980.48_4185208.02	0.06319	1.00996	1.63539	0.057	0.14073	0.45416	6.29293	0.58619
648680.48	4185228.02	648680.48_4185228.02	0.06124	3.72513	2.88857	0.05924	0.13628	0.41096	3.62768	0.58165
648700.48	4185228.02	648700.48_4185228.02	0.06133	3.07417	2.78029	0.05838	0.13694	0.41612	3.88495	0.58385
648720.48	4185228.02	648720.48_4185228.02	0.06144	2.63799	2.67054	0.05753	0.13749	0.42132	4.15433	0.5856
648740.48	4185228.02	648740.48_4185228.02	0.06158	2.32517	2.55787	0.05671	0.13793	0.42643	4.43262	0.58687
648760.48	4185228.02	648760.48_4185228.02	0.06173	2.08774	2.44313	0.05597	0.13828	0.43128	4.71617	0.58763
648780.48	4185228.02	648780.48_4185228.02	0.06188	1.89911	2.33022	0.05534	0.13853	0.43581	5.00337	0.5879
648800.48	4185228.02	648800.48_4185228.02	0.06204	1.74407	2.2222	0.05488	0.13874	0.44006	5.29425	0.58766
648820.48	4185228.02	648820.48_4185228.02	0.06223	1.61309	2.12011	0.0546	0.13895	0.44406	5.58505	0.58692
648840.48	4185228.02	648840.48_4185228.02	0.06243	1.50007	2.02379	0.05451	0.13918	0.44772	5.86381	0.58562
648680.48	4185248.02	648680.48_4185248.02	0.06181	3.77152	2.37343	0.05806	0.13839	0.42468	4.12422	0.56299
648700.48	4185248.02	648700.48_4185248.02	0.06191	3.098	2.29691	0.05721	0.13907	0.43008	4.43441	0.56468
648720.48	4185248.02	648720.48_4185248.02	0.06203	2.65256	2.22732	0.05638	0.13963	0.43546	4.75532	0.56593
648871.39	4185481.28	648871.39_4185481.28	0.07077	1.07237	0.70606	0.04704	0.17316	0.71276	105.47538	0.37746
648891.39	4185481.28	648891.39_4185481.28	0.07105	1.0177	0.69816	0.04729	0.17438	0.7189	95.17968	0.37494
648911.39	4185481.28	648911.39_4185481.28	0.07129	0.96941	0.69027	0.04744	0.17565	0.72427	87.16886	0.37217
648931.39	4185481.28	648931.39_4185481.28	0.07153	0.92619	0.68185	0.04746	0.17705	0.72956	80.33031	0.36914
648951.39	4185481.28	648951.39_4185481.28	0.07178	0.88734	0.67312	0.04734	0.1786	0.73505	72.39376	0.36596
648971.39	4185481.28	648971.39_4185481.28	0.07204	0.85222	0.66415	0.04707	0.18031	0.74083	58.05003	0.3627
648771.39	4185501.28	648771.39_4185501.28	0.07028	1.42594	0.69779	0.04507	0.1725	0.71065	107.49049	0.37525
648791.39	4185501.28	648791.39_4185501.28	0.0705	1.32377	0.69079	0.04528	0.17306	0.71767	89.83347	0.37387
648811.39	4185501.28	648811.39_4185501.28	0.07076	1.23657	0.68463	0.04556	0.1738	0.7251	78.92461	0.3723
648831.39	4185501.28	648831.39_4185501.28	0.07097	1.16257	0.6799	0.04589	0.1745	0.73109	69.17247	0.37047
648851.39	4185501.28	648851.39_4185501.28	0.07119	1.09788	0.67469	0.04622	0.17534	0.73685	61.5629	0.36834
648871.39	4185501.28	648871.39_4185501.28	0.07146	1.04101	0.66897	0.04652	0.17643	0.743	56.17469	0.36606
648891.39	4185501.28	648891.39_4185501.28	0.07177	0.99051	0.66246	0.04675	0.17779	0.74984	52.56056	0.36363
648911.39	4185501.28	648911.39_4185501.28	0.07201	0.94567	0.65575	0.04687	0.17913	0.7554	48.12695	0.36087
648931.39	4185501.28	648931.39_4185501.28	0.07225	0.9053	0.64844	0.04685	0.18059	0.76081	43.30903	0.35783

648951.39	4185501.28	648951.39_4185501.28	0.07251	0.8689	0.64075	0.0467	0.18222	0.76653	37.57975	0.35473
648971.39	4185501.28	648971.39_4185501.28	0.07279	0.83584	0.63268	0.0464	0.18403	0.77272	31.43148	0.35159
648711.39	4185521.28	648711.39_4185521.28	0.07046	1.74639	0.69641	0.04453	0.17391	0.71811	103.4365	0.36748
648731.39	4185521.28	648731.39_4185521.28	0.07057	1.58877	0.6817	0.04438	0.1744	0.72528	80.30298	0.3665
648751.39	4185521.28	648751.39_4185521.28	0.07073	1.46083	0.6698	0.04438	0.1749	0.73281	66.83827	0.36544
648771.39	4185521.28	648771.39_4185521.28	0.07093	1.35492	0.66073	0.04452	0.17546	0.74054	58.18537	0.36427
648791.39	4185521.28	648791.39_4185521.28	0.07119	1.26554	0.65401	0.04477	0.17618	0.74877	52.50156	0.36303
648811.39	4185521.28	648811.39_4185521.28	0.07147	1.18805	0.64839	0.04507	0.17698	0.75666	47.96406	0.36149
648831.39	4185521.28	648831.39_4185521.28	0.0717	1.12122	0.64386	0.04541	0.17778	0.76321	43.56794	0.35966
648851.39	4185521.28	648851.39_4185521.28	0.07193	1.06241	0.63946	0.04573	0.17872	0.76937	39.81502	0.35752
648871.39	4185521.28	648871.39_4185521.28	0.07219	1.01034	0.63477	0.04601	0.17989	0.77586	36.85335	0.35524
648891.39	4185521.28	648891.39_4185521.28	0.07251	0.96382	0.62941	0.04621	0.18133	0.78299	34.49193	0.35282
648911.39	4185521.28	648911.39_4185521.28	0.07275	0.92233	0.62382	0.0463	0.18274	0.78868	31.43856	0.35006
648931.39	4185521.28	648931.39_4185521.28	0.073	0.88477	0.61757	0.04625	0.18429	0.79433	28.06599	0.34707
648951.39	4185521.28	648951.39_4185521.28	0.07325	0.85072	0.61087	0.04606	0.18598	0.80013	24.46319	0.34401
648971.39	4185521.28	648971.39_4185521.28	0.07355	0.81967	0.60376	0.04574	0.18787	0.80651	21.38573	0.341
648651.39	4185541.28	648651.39_4185541.28	0.07085	2.24043	0.71066	0.04494	0.17463	0.72502	90.68773	0.35907
648671.39	4185541.28	648671.39_4185541.28	0.07097	1.97948	0.69422	0.04448	0.17563	0.7339	78.04244	0.35861
648691.39	4185541.28	648691.39_4185541.28	0.07101	1.78027	0.67769	0.0441	0.17626	0.74096	63.62292	0.35785
648711.39	4185541.28	648711.39_4185541.28	0.07113	1.61942	0.66203	0.04388	0.17692	0.74917	54.08818	0.3571
648731.39	4185541.28	648731.39_4185541.28	0.07129	1.48863	0.6483	0.04379	0.17753	0.7576	47.36439	0.35625
648751.39	4185541.28	648751.39_4185541.28	0.07146	1.38002	0.63677	0.04384	0.17809	0.76573	42.23544	0.3552
648771.39	4185541.28	648771.39_4185541.28	0.07165	1.28839	0.62763	0.04401	0.17867	0.77373	38.27679	0.35397
648791.39	4185541.28	648791.39_4185541.28	0.07192	1.21006	0.62079	0.04428	0.17942	0.78235	35.43397	0.35269
648811.39	4185541.28	648811.39_4185541.28	0.07219	1.1414	0.61526	0.0446	0.18029	0.79065	32.9764	0.35114
648831.39	4185541.28	648831.39_4185541.28	0.07242	1.08145	0.61101	0.04493	0.18114	0.79737	30.40624	0.34926
648851.39	4185541.28	648851.39_4185541.28	0.07266	1.0281	0.6071	0.04524	0.18219	0.80407	28.20187	0.34715
648871.39	4185541.28	648871.39_4185541.28	0.07293	0.98055	0.60317	0.0455	0.18345	0.81086	26.25155	0.34486
648891.39	4185541.28	648891.39_4185541.28	0.07326	0.93786	0.59878	0.04568	0.185	0.81843	24.55803	0.34247
648911.39	4185541.28	648911.39_4185541.28	0.0735	0.89955	0.5942	0.04573	0.18647	0.82418	22.3247	0.3397
648931.39	4185541.28	648931.39_4185541.28	0.07376	0.86466	0.5889	0.04565	0.18811	0.83004	20.00932	0.33679
648951.39	4185541.28	648951.39_4185541.28	0.07402	0.83286	0.58314	0.04543	0.18987	0.8359	17.77146	0.33378
648971.39	4185541.28	648971.39_4185541.28	0.07432	0.80375	0.57696	0.04509	0.19184	0.84239	15.98447	0.33087
648631.39	4185561.28	648631.39_4185561.28	0.0714	2.25633	0.68916	0.04468	0.17646	0.74703	38.9151	0.34955
648651.39	4185561.28	648651.39_4185561.28	0.07155	1.99704	0.6757	0.04419	0.17774	0.75752	38.40285	0.3493
648671.39	4185561.28	648671.39_4185561.28	0.07169	1.79545	0.66064	0.04377	0.17879	0.76723	37.32592	0.34885
648691.39	4185561.28	648691.39_4185561.28	0.07172	1.63765	0.64543	0.04344	0.17942	0.77446	35.03298	0.34803
648711.39	4185561.28	648711.39_4185561.28	0.07185	1.50685	0.63088	0.04327	0.18011	0.7833	32.99395	0.3473
648731.39	4185561.28	648731.39_4185561.28	0.07205	1.39805	0.61798	0.04324	0.18082	0.79279	31.07668	0.34651
648751.39	4185561.28	648751.39_4185561.28	0.07223	1.30577	0.60683	0.04334	0.18143	0.80159	29.0453	0.34546
648771.39	4185561.28	648771.39_4185561.28	0.0724	1.22651	0.59768	0.04352	0.18201	0.80965	27.03804	0.34414
648791.39	4185561.28	648791.39_4185561.28	0.07263	1.15773	0.59059	0.0438	0.18272	0.81791	25.3337	0.34271
648811.39	4185561.28	648811.39_4185561.28	0.07293	1.09715	0.58515	0.04414	0.18372	0.82712	24.0272	0.34123
648831.39	4185561.28	648831.39_4185561.28	0.07315	1.04348	0.58097	0.04446	0.18465	0.83412	22.43265	0.3393
648851.39	4185561.28	648851.39_4185561.28	0.0734	0.99524	0.57734	0.04475	0.18578	0.84117	20.98424	0.33718
648871.39	4185561.28	648871.39_4185561.28	0.0737	0.95197	0.574	0.045	0.18717	0.84858	19.66291	0.33496
648891.39	4185561.28	648891.39_4185561.28	0.07403	0.91281	0.57036	0.04515	0.18881	0.85635	18.3637	0.33256
648911.39	4185561.28	648911.39_4185561.28	0.07426	0.87742	0.56658	0.04517	0.19034	0.86209	16.7284	0.32979
648931.39	4185561.28	648931.39_4185561.28	0.07453	0.84502	0.56215	0.04506	0.19207	0.86808	15.14943	0.32693
648951.39	4185561.28	648951.39_4185561.28	0.07479	0.81529	0.55725	0.04481	0.19389	0.87386	13.69246	0.32399
648971.39	4185561.28	648971.39_4185561.28	0.07511	0.78803	0.55197	0.04444	0.19594	0.88051	12.56133	0.3212
648631.39	4185581.28	648631.39_4185581.28	0.07214	1.9953	0.65592	0.04393	0.17972	0.78202	24.44473	0.34027
648651.39	4185581.28	648651.39_4185581.28	0.07225	1.80008	0.64362	0.04347	0.18093	0.79231	24.12153	0.33991
648671.39	4185581.28	648671.39_4185581.28	0.07241	1.64207	0.62991	0.04309	0.18204	0.80291	23.72566	0.33948
648691.39	4185581.28	648691.39_4185581.28	0.07252	1.51489	0.61603	0.04284	0.18284	0.81198	22.98854	0.33884
648711.39	4185581.28	648711.39_4185581.28	0.07259	1.40771	0.6023	0.04269	0.1834	0.81992	22.08457	0.33789
648731.39	4185581.28	648731.39_4185581.28	0.07277	1.31664	0.59005	0.0427	0.18412	0.82985	21.49995	0.33705
648751.39	4185581.28	648751.39_4185581.28	0.07298	1.23802	0.57932	0.04284	0.1848	0.83952	20.76913	0.33603
648771.39	4185581.28	648771.39_4185581.28	0.07319	1.16948	0.57037	0.04306	0.18553	0.84888	19.93659	0.3348
648791.39	4185581.28	648791.39_4185581.28	0.07343	1.10921	0.56325	0.04336	0.18632	0.85771	19.03015	0.33335
648811.39	4185581.28	648811.39_4185581.28	0.07368	1.05552	0.55768	0.04368	0.18729	0.86647	18.14089	0.33173
648831.39	4185581.28	648831.39_4185581.28	0.0739	1.0075	0.55347	0.044	0.18828	0.87361	17.09581	0.32976
648851.39	4185581.28	648851.39_4185581.28	0.07417	0.96401	0.55003	0.04428	0.18954	0.88123	16.12989	0.32767
648871.39	4185581.28	648871.39_4185581.28	0.07447	0.92464	0.54703	0.0445	0.19103	0.88895	15.16439	0.32544
648891.39	4185581.28	648891.39_4185581.28	0.07481	0.88871	0.54396	0.04462	0.19276	0.89699	14.19639	0.32307
648911.39	4185581.28	648911.39_4185581.28	0.07504	0.85596	0.54082	0.04461	0.19437	0.90265	13.01497	0.32032
648931.39	4185581.28	648931.39_4185581.28	0.07531	0.8258	0.53714	0.04447	0.19617	0.90865	11.92432	0.3175
648951.39	4185581.28	648951.39_4185581.28	0.07559	0.79802	0.53305	0.04419	0.19808	0.91448	10.94965	0.31465
648611.39	4185601.28	648611.39_4185601.28	0.07273	1.97593	0.6348	0.0437	0.18154	0.80758	17.24012	0.33158
648631.39	4185601.28	648631.39_4185601.28	0.07288	1.79122	0.62539	0.04321	0.18305	0.81954	17.41435	0.33136
648651.39	4185601.28	648651.39_4185601.28	0.073	1.6396	0.61416	0.04278	0.18428	0.83031	17.2417	0.33098
648671.39	4185601.28	648671.39_4185601.28	0.07315	1.51374	0.60161	0.04245	0.18539	0.84133	17.08958	0.33051
648691.39	4185601.28	648691.39_4185601.28	0.07329	1.40895	0.58857	0.04224	0.18629	0.85168	16.75694	0.32986
648711.39	4185601.28	648711.39_4185601.28	0.07335	1.32106	0.57607	0.04214	0.18683	0.85977	16.17898	0.32891
648731.39	4185601.28	648731.39_4185601.28	0.07352	1.24407	0.56437	0.04219	0.18752	0.86981	15.81486	0.32799
648751.39	4185601.28	648751.39_4185601.28	0.07369	1.17665	0.55397	0.04235	0.18819	0.87944	15.40651	0.32685
648771.39	4185601.28	648771.39_4185601.28	0.07391	1.11722	0.54527	0.04259	0.18897	0.88929	14.99008	0.3256
648791.39	4185601.28	648791.39_4185601.28	0.07417	1.06431	0.53824	0.04291	0.1899	0.89926	14.54834	0.32421
648811.39	4185601.28	648811.39_4185601.28	0.07446	1.01658	0.53258	0.04324	0.191	0.90892	14.04165	0.32262
648831.39	4185601.28	648831.39_4185601.28	0.07469	0.9736	0.52833	0.04355	0.19211	0.91659	13.36411	0.32066
648851.39	4185601.28	648851.39_4185601.28	0.07496	0.9343	0.52492	0.04381	0.19345	0.92431	12.66613	0.31855
648871.39	4185601.28	648871.39_4185601.28	0.07526	0.89843	0.52212	0.044	0.19503	0.93219	11.95527	0.31631
648891.39	4185601.28	648891.39_4185601.28	0.0756	0.86546	0.51943	0.0441	0.19686	0.94046	11.25003	0.31397
648911.39	4185601.28	648911.39_4185601.28	0.07584	0.83507	0.51677	0.04405	0.19856	0.94601	10.40318	0.31124
648931.39	4185601.28	648931.39_4185601.28	0.07611	0.80693	0.51371	0.04388	0.20043	0.95194	9.63797	0.30848
648951.39	4185601.28	648951.39_4185601.28	0.0764	0.78091	0.51034	0.04358	0.20242	0.9577	8.96357	0.30573

648591.39	4185621.28	648591.39_4185621.28	0.07337	1.93947	0.61325	0.0435	0.18335	0.83507	12.90385	0.32334
648611.39	4185621.28	648611.39_4185621.28	0.0735	1.77153	0.60599	0.04297	0.18501	0.84769	13.28609	0.32308
648631.39	4185621.28	648631.39_4185621.28	0.07367	1.62786	0.59724	0.04251	0.18656	0.8606	13.34573	0.32288
648651.39	4185621.28	648651.39_4185621.28	0.0738	1.50608	0.58665	0.04212	0.18786	0.87245	13.23531	0.32244
648671.39	4185621.28	648671.39_4185621.28	0.07393	1.40446	0.57507	0.04183	0.18892	0.88346	13.11782	0.32189
648691.39	4185621.28	648691.39_4185621.28	0.07405	1.31891	0.56347	0.04167	0.18976	0.89379	12.9465	0.32125
648711.39	4185621.28	648711.39_4185621.28	0.07415	1.24496	0.55183	0.04163	0.19044	0.90349	12.63719	0.32038
648731.39	4185621.28	648731.39_4185621.28	0.0743	1.17945	0.54074	0.04171	0.1911	0.91353	12.31628	0.31935
648751.39	4185621.28	648751.39_4185621.28	0.07446	1.12127	0.53074	0.04189	0.19179	0.9235	12.00416	0.31816
648771.39	4185621.28	648771.39_4185621.28	0.07469	1.06945	0.52228	0.04216	0.19265	0.9341	11.7334	0.3169
648791.39	4185621.28	648791.39_4185621.28	0.07494	1.02272	0.51526	0.04248	0.19363	0.94427	11.42323	0.31544
648811.39	4185621.28	648811.39_4185621.28	0.07525	0.98017	0.50954	0.04281	0.19488	0.95478	11.10135	0.31387
648831.39	4185621.28	648831.39_4185621.28	0.07548	0.94156	0.50524	0.0431	0.19605	0.96249	10.61487	0.31189
648851.39	4185621.28	648851.39_4185621.28	0.07575	0.90596	0.50178	0.04334	0.19749	0.97039	10.11002	0.30978
648871.39	4185621.28	648871.39_4185621.28	0.07607	0.8733	0.4991	0.04351	0.19921	0.97871	9.60642	0.30757
648891.39	4185621.28	648891.39_4185621.28	0.07641	0.843	0.49667	0.04358	0.20112	0.98697	9.0922	0.30525
648911.39	4185621.28	648911.39_4185621.28	0.07666	0.81478	0.49436	0.0435	0.20291	0.99251	8.49049	0.30256
648931.39	4185621.28	648931.39_4185621.28	0.07694	0.78849	0.49179	0.0433	0.20487	0.9982	7.94543	0.29986
648951.39	4185621.28	648951.39_4185621.28	0.07723	0.76411	0.48901	0.04298	0.20693	1.00377	7.46721	0.2972
648571.39	4185641.28	648571.39_4185641.28	0.07394	1.88058	0.59067	0.04328	0.18476	0.86059	9.94157	0.31513
648591.39	4185641.28	648591.39_4185641.28	0.07412	1.73875	0.58579	0.04276	0.18679	0.87663	10.43749	0.31508
648611.39	4185641.28	648611.39_4185641.28	0.07431	1.60955	0.57941	0.04228	0.18862	0.89153	10.67244	0.315
648631.39	4185641.28	648631.39_4185641.28	0.07445	1.49509	0.57115	0.04184	0.19015	0.90462	10.66938	0.31466
648651.39	4185641.28	648651.39_4185641.28	0.07453	1.39831	0.56181	0.04148	0.1913	0.91552	10.5321	0.31415
648671.39	4185641.28	648671.39_4185641.28	0.07463	1.31429	0.55129	0.04123	0.19232	0.92658	10.41286	0.31354
648691.39	4185641.28	648691.39_4185641.28	0.07477	1.24151	0.54027	0.04112	0.19325	0.93827	10.33403	0.31288
648711.39	4185641.28	648711.39_4185641.28	0.07496	1.17762	0.52921	0.04113	0.19413	0.95054	10.21337	0.31211
648731.39	4185641.28	648731.39_4185641.28	0.07508	1.12161	0.51881	0.04124	0.19479	0.96063	9.95445	0.31103
648751.39	4185641.28	648751.39_4185641.28	0.07528	1.07123	0.50934	0.04145	0.1956	0.97185	9.71844	0.30988
648771.39	4185641.28	648771.39_4185641.28	0.0755	1.02573	0.50107	0.04174	0.1965	0.98271	9.47312	0.30856
648791.39	4185641.28	648791.39_4185641.28	0.07578	0.98423	0.49406	0.04206	0.19765	0.99423	9.24674	0.30716
648811.39	4185641.28	648811.39_4185641.28	0.07603	0.94641	0.48846	0.04238	0.19883	1.00362	8.93953	0.30544
648831.39	4185641.28	648831.39_4185641.28	0.07628	0.91148	0.48398	0.04266	0.20014	1.01185	8.57994	0.30346
648851.39	4185641.28	648851.39_4185641.28	0.07657	0.87923	0.48051	0.04288	0.20173	1.02028	8.21609	0.30138
648871.39	4185641.28	648871.39_4185641.28	0.07689	0.84934	0.4778	0.04302	0.20353	1.02847	7.83956	0.29916
648891.39	4185641.28	648891.39_4185641.28	0.07724	0.82147	0.47553	0.04306	0.20555	1.03672	7.46765	0.29687
648911.39	4185641.28	648911.39_4185641.28	0.07749	0.79524	0.47343	0.04296	0.20743	1.04209	7.03663	0.29423
648931.39	4185641.28	648931.39_4185641.28	0.07777	0.77064	0.47121	0.04273	0.20945	1.04735	6.64207	0.29159
648951.39	4185641.28	648951.39_4185641.28	0.07808	0.74781	0.46893	0.04238	0.2116	1.05265	6.2992	0.28901
648611.39	4185661.28	648611.39_4185661.28	0.07508	1.47907	0.55468	0.04159	0.19223	0.93763	8.79331	0.30707
648631.39	4185661.28	648631.39_4185661.28	0.07522	1.38648	0.54713	0.04119	0.19378	0.95153	8.77967	0.30676
648651.39	4185661.28	648651.39_4185661.28	0.07528	1.30612	0.53841	0.04086	0.1949	0.96251	8.6505	0.30615
648671.39	4185661.28	648671.39_4185661.28	0.0754	1.23539	0.52872	0.04066	0.19595	0.97467	8.55002	0.30554
648691.39	4185661.28	648691.39_4185661.28	0.07553	1.17352	0.51851	0.04059	0.19689	0.987	8.47981	0.30485
648711.39	4185661.28	648711.39_4185661.28	0.07575	1.11872	0.50824	0.04065	0.19789	1.00093	8.42938	0.30413
648731.39	4185661.28	648731.39_4185661.28	0.0759	1.07016	0.49845	0.0408	0.19865	1.01233	8.26387	0.30308
648751.39	4185661.28	648751.39_4185661.28	0.07609	1.02613	0.48942	0.04103	0.19951	1.02406	8.06317	0.30191
648771.39	4185661.28	648771.39_4185661.28	0.07635	0.98591	0.48136	0.04133	0.20057	1.03635	7.86167	0.30061
648791.39	4185661.28	648791.39_4185661.28	0.07661	0.94906	0.47447	0.04165	0.20175	1.04751	7.63297	0.2991
648811.39	4185661.28	648811.39_4185661.28	0.07683	0.91527	0.46895	0.04195	0.20294	1.05631	7.3523	0.29731
648831.39	4185661.28	648831.39_4185661.28	0.0771	0.88365	0.46439	0.04222	0.20441	1.06512	7.06973	0.29536
648851.39	4185661.28	648851.39_4185661.28	0.07741	0.85429	0.46085	0.04242	0.20614	1.07391	6.79023	0.29331
648871.39	4185661.28	648871.39_4185661.28	0.07775	0.82691	0.45812	0.04255	0.20811	1.08268	6.51648	0.29117
648891.39	4185661.28	648891.39_4185661.28	0.07806	0.80113	0.4559	0.04255	0.21011	1.0896	6.21632	0.28879
648911.39	4185661.28	648911.39_4185661.28	0.07834	0.77672	0.4539	0.04241	0.21212	1.09488	5.90598	0.28623
648931.39	4185661.28	648931.39_4185661.28	0.07863	0.75378	0.45197	0.04216	0.21423	1.09989	5.6224	0.28368
648951.39	4185661.28	648951.39_4185661.28	0.07895	0.73238	0.45006	0.0418	0.21645	1.10472	5.37242	0.28119
648611.39	4185681.28	648611.39_4185681.28	0.07585	1.3723	0.5317	0.04092	0.19594	0.98736	7.40311	0.29944
648631.39	4185681.28	648631.39_4185681.28	0.07601	1.29599	0.52481	0.04056	0.19753	1.00246	7.38911	0.29916
648651.39	4185681.28	648651.39_4185681.28	0.0761	1.22831	0.51678	0.04029	0.19874	1.01516	7.29715	0.29859
648671.39	4185681.28	648671.39_4185681.28	0.07619	1.16803	0.50773	0.04012	0.19975	1.02729	7.18643	0.29789
648691.39	4185681.28	648691.39_4185681.28	0.07634	1.11491	0.49829	0.04009	0.20074	1.0408	7.11913	0.29719
648711.39	4185681.28	648711.39_4185681.28	0.07653	1.0676	0.48875	0.04018	0.2017	1.05471	7.06219	0.29639
648731.39	4185681.28	648731.39_4185681.28	0.07675	1.02466	0.47935	0.04037	0.2027	1.06897	6.97594	0.29543
648751.39	4185681.28	648751.39_4185681.28	0.07695	0.986	0.47077	0.04062	0.20363	1.08134	6.81689	0.29425
648771.39	4185681.28	648771.39_4185681.28	0.0772	0.95023	0.46287	0.04093	0.20477	1.09399	6.633	0.29287
648791.39	4185681.28	648791.39_4185681.28	0.0774	0.91773	0.45648	0.04124	0.20587	1.10369	6.40097	0.29128
648811.39	4185681.28	648811.39_4185681.28	0.07765	0.88706	0.45086	0.04154	0.20724	1.11341	6.16903	0.2895
648831.39	4185681.28	648831.39_4185681.28	0.07795	0.85838	0.4463	0.04179	0.20889	1.12293	5.94159	0.28762
648851.39	4185681.28	648851.39_4185681.28	0.07828	0.8315	0.44269	0.04198	0.21077	1.13202	5.71754	0.28559
648871.39	4185681.28	648871.39_4185681.28	0.07863	0.80616	0.43982	0.04207	0.21287	1.14077	5.4996	0.28347
648891.39	4185681.28	648891.39_4185681.28	0.0789	0.78219	0.43761	0.04203	0.21484	1.14598	5.24781	0.28102
648911.39	4185681.28	648911.39_4185681.28	0.07921	0.75953	0.43569	0.04187	0.21699	1.15138	5.02182	0.27857
648931.39	4185681.28	648931.39_4185681.28	0.07951	0.73812	0.43396	0.0416	0.2192	1.15591	4.81137	0.2761
648951.39	4185681.28	648951.39_4185681.28	0.07985	0.71809	0.43236	0.04122	0.22151	1.16035	4.62833	0.27373
648631.39	4185701.28	648631.39_4185701.28	0.07678	1.22074	0.50396	0.03995	0.20133	1.05688	6.31499	0.29173
648651.39	4185701.28	648651.39_4185701.28	0.07694	1.16277	0.49657	0.03974	0.20272	1.07263	6.25778	0.29135
648671.39	4185701.28	648671.39_4185701.28	0.07702	1.11101	0.48823	0.03961	0.20373	1.08537	6.15372	0.29058
648691.39	4185701.28	648691.39_4185701.28	0.07715	1.06469	0.47938	0.03962	0.2047	1.09927	6.07235	0.28981
648711.39	4185701.28	648711.39_4185701.28	0.07733	1.02322	0.47045	0.03974	0.20568	1.11372	6.00819	0.28895
648731.39	4185701.28	648731.39_4185701.28	0.07757	0.98549	0.46167	0.03996	0.20677	1.12912	5.94184	0.28801
648751.39	4185701.28	648751.39_4185701.28	0.0778	0.95081	0.45332	0.04022	0.20787	1.1431	5.82625	0.28681
648771.39	4185701.28	648771.39_4185701.28	0.07799	0.91934	0.44612	0.04053	0.20888	1.15381	5.64818	0.28535
648791.39	4185701.28	648791.39_4185701.28	0.07823	0.88968	0.43962	0.04084	0.21021	1.16504	5.46148	0.28377
648811.39	4185701.28	648811.39_4185701.28	0.07852	0.86188	0.43409	0.04113	0.21178	1.17572	5.27057	0.28205
648831.39	4185701.28	648831.39_4185701.28	0.07884	0.83565	0.42952	0.04137	0.2136	1.18571	5.08181	0.28019

648851.39	4185701.28	648851.39_4185701.28	0.0792	0.81074	0.42574	0.04153	0.21568	1.19541	4.90076	0.27821
648871.39	4185701.28	648871.39_4185701.28	0.07948	0.78728	0.42293	0.04159	0.21768	1.20152	4.69721	0.27597
648891.39	4185701.28	648891.39_4185701.28	0.07978	0.76492	0.42062	0.04152	0.21983	1.20695	4.50346	0.27361
648911.39	4185701.28	648911.39_4185701.28	0.0801	0.74377	0.41874	0.04134	0.22208	1.21186	4.32657	0.27124
648931.39	4185701.28	648931.39_4185701.28	0.08043	0.72383	0.41719	0.04105	0.22443	1.21629	4.1696	0.2689
648631.39	4185721.28	648631.39_4185721.28	0.07758	1.15737	0.48447	0.03937	0.20529	1.11697	5.47714	0.28467
648651.39	4185721.28	648651.39_4185721.28	0.07775	1.10761	0.4777	0.0392	0.20674	1.1343	5.42684	0.28425
648671.39	4185721.28	648671.39_4185721.28	0.07788	1.0625	0.47001	0.03913	0.20788	1.14939	5.34259	0.28359
648691.39	4185721.28	648691.39_4185721.28	0.078	1.02169	0.46172	0.03917	0.20884	1.16347	5.25146	0.28272
648711.39	4185721.28	648711.39_4185721.28	0.07817	0.9849	0.45333	0.03932	0.20985	1.17859	5.17892	0.28182
648731.39	4185721.28	648731.39_4185721.28	0.07838	0.95138	0.44511	0.03955	0.21091	1.1936	5.10584	0.28078
648751.39	4185721.28	648751.39_4185721.28	0.07864	0.92036	0.43726	0.03984	0.21216	1.20899	5.01919	0.27964
648771.39	4185721.28	648771.39_4185721.28	0.07885	0.89172	0.43021	0.04015	0.21336	1.22094	4.88284	0.27819
648791.39	4185721.28	648791.39_4185721.28	0.0791	0.86474	0.42391	0.04045	0.21479	1.23208	4.7249	0.27657
648811.39	4185721.28	648811.39_4185721.28	0.0794	0.83931	0.41846	0.04073	0.21653	1.2432	4.56574	0.27489
648831.39	4185721.28	648831.39_4185721.28	0.07977	0.81502	0.41377	0.04095	0.21858	1.25416	4.41187	0.27305
648851.39	4185721.28	648851.39_4185721.28	0.08007	0.79206	0.41014	0.04108	0.2206	1.26145	4.2423	0.27101
648871.39	4185721.28	648871.39_4185721.28	0.08037	0.77012	0.4072	0.04111	0.22277	1.26749	4.07661	0.26881
648891.39	4185721.28	648891.39_4185721.28	0.0807	0.74925	0.40484	0.04103	0.22507	1.27284	3.92247	0.26655
648911.39	4185721.28	648911.39_4185721.28	0.08104	0.72946	0.40298	0.04083	0.22745	1.27721	3.7805	0.26425
648931.39	4185721.28	648931.39_4185721.28	0.08141	0.71072	0.40145	0.04052	0.22994	1.2815	3.65837	0.26204
648631.39	4185741.28	648631.39_4185741.28	0.07843	1.10358	0.46631	0.03883	0.20946	1.18366	4.80788	0.2779
648651.39	4185741.28	648651.39_4185741.28	0.07857	1.06016	0.45997	0.03869	0.21085	1.20099	4.75025	0.27738
648671.39	4185741.28	648671.39_4185741.28	0.07876	1.0205	0.45284	0.03867	0.21219	1.21964	4.68541	0.27684
648691.39	4185741.28	648691.39_4185741.28	0.07888	0.98448	0.44518	0.03875	0.21319	1.23459	4.59557	0.27596
648711.39	4185741.28	648711.39_4185741.28	0.07902	0.95145	0.43726	0.03891	0.21417	1.24935	4.51038	0.27495
648731.39	4185741.28	648731.39_4185741.28	0.07923	0.92129	0.42952	0.03916	0.2153	1.26501	4.43758	0.27389
648751.39	4185741.28	648751.39_4185741.28	0.07947	0.89331	0.42213	0.03946	0.21656	1.27978	4.35584	0.27265
648771.39	4185741.28	648771.39_4185741.28	0.07976	0.86703	0.41524	0.03977	0.21808	1.29454	4.26151	0.27132
648791.39	4185741.28	648791.39_4185741.28	0.08002	0.84233	0.40917	0.04007	0.21966	1.30587	4.13541	0.26972
648811.39	4185741.28	648811.39_4185741.28	0.08034	0.81874	0.40373	0.04033	0.22158	1.31738	4.00527	0.26801
648831.39	4185741.28	648831.39_4185741.28	0.08066	0.79634	0.39922	0.04053	0.22362	1.32621	3.86413	0.26612
648851.39	4185741.28	648851.39_4185741.28	0.08094	0.77493	0.39558	0.04063	0.22571	1.3321	3.71568	0.26405
648871.39	4185741.28	648871.39_4185741.28	0.08128	0.7544	0.39254	0.04064	0.22806	1.33811	3.58054	0.26192
648891.39	4185741.28	648891.39_4185741.28	0.08163	0.7348	0.39012	0.04053	0.23048	1.34268	3.45233	0.25971
648911.39	4185741.28	648911.39_4185741.28	0.08202	0.71622	0.38818	0.04032	0.23309	1.3476	3.34297	0.25759
648651.39	4185761.28	648651.39_4185761.28	0.07942	1.01894	0.44337	0.0382	0.21517	1.2753	4.19983	0.27083
648671.39	4185761.28	648671.39_4185761.28	0.07961	0.98395	0.43678	0.03822	0.21651	1.29471	4.13384	0.27022
648691.39	4185761.28	648691.39_4185761.28	0.07979	0.95166	0.42956	0.03834	0.21774	1.31316	4.05837	0.26945
648711.39	4185761.28	648711.39_4185761.28	0.07993	0.92209	0.42222	0.03853	0.21874	1.32805	3.97125	0.26838
648731.39	4185761.28	648731.39_4185761.28	0.08012	0.89466	0.41488	0.03879	0.21993	1.34371	3.89523	0.26726
648751.39	4185761.28	648751.39_4185761.28	0.08035	0.86901	0.40785	0.03909	0.22125	1.35818	3.81821	0.26598
648771.39	4185761.28	648771.39_4185761.28	0.08062	0.84488	0.40131	0.0394	0.22284	1.37225	3.73713	0.26458
648791.39	4185761.28	648791.39_4185761.28	0.08095	0.82185	0.39527	0.03969	0.22473	1.38576	3.64637	0.26306
648811.39	4185761.28	648811.39_4185761.28	0.08127	0.79992	0.38991	0.03993	0.22676	1.39639	3.53784	0.2613

648831.39	4185761.28	648831.39_4185761.28	0.08155	0.77921	0.3857	0.04011	0.22879	1.40263	3.41265	0.25941
648851.39	4185761.28	648851.39_4185761.28	0.08187	0.75916	0.38195	0.04019	0.23113	1.40901	3.29318	0.25739
648871.39	4185761.28	648871.39_4185761.28	0.08223	0.73991	0.37886	0.04017	0.23361	1.41417	3.179	0.25532
648891.39	4185761.28	648891.39_4185761.28	0.0826	0.72147	0.37637	0.04004	0.2362	1.41845	3.07439	0.25321
648691.39	4185781.28	648691.39_4185781.28	0.08068	0.92275	0.4149	0.03794	0.22234	1.39765	3.60386	0.26309
648711.39	4185781.28	648711.39_4185781.28	0.08088	0.89586	0.40794	0.03816	0.22358	1.41535	3.52716	0.2621
648731.39	4185781.28	648731.39_4185781.28	0.08104	0.87085	0.40109	0.03843	0.22477	1.43002	3.44846	0.26089
648751.39	4185781.28	648751.39_4185781.28	0.08128	0.8472	0.3944	0.03874	0.22623	1.4448	3.37798	0.2596
648771.39	4185781.28	648771.39_4185781.28	0.08156	0.82473	0.38809	0.03904	0.22796	1.45881	3.30888	0.25819
648791.39	4185781.28	648791.39_4185781.28	0.08188	0.80318	0.38219	0.03931	0.22998	1.4716	3.23396	0.2566
648811.39	4185781.28	648811.39_4185781.28	0.08218	0.78286	0.37726	0.03954	0.23206	1.48013	3.14326	0.25487
648831.39	4185781.28	648831.39_4185781.28	0.08252	0.7633	0.37283	0.03969	0.23441	1.48777	3.04771	0.25302
648851.39	4185781.28	648851.39_4185781.28	0.08283	0.74455	0.36918	0.03975	0.23681	1.49197	2.94436	0.25102
648871.39	4185781.28	648871.39_4185781.28	0.08321	0.72642	0.36604	0.03971	0.23945	1.49637	2.84914	0.249
648891.39	4185781.28	648891.39_4185781.28	0.0836	0.7089	0.36342	0.03955	0.24218	1.49957	2.76052	0.24694
648691.39	4185801.28	648691.39_4185801.28	0.0816	0.89703	0.40109	0.03756	0.22714	1.49053	3.22176	0.25694
648711.39	4185801.28	648711.39_4185801.28	0.08179	0.87247	0.39454	0.0378	0.22846	1.50877	3.14841	0.25592
648731.39	4185801.28	648731.39_4185801.28	0.08201	0.84929	0.38796	0.03808	0.22989	1.52543	3.07827	0.25476
648751.39	4185801.28	648751.39_4185801.28	0.08222	0.82737	0.38168	0.03839	0.2314	1.53888	3.00958	0.25342
648771.39	4185801.28	648771.39_4185801.28	0.08254	0.80612	0.37534	0.03868	0.23339	1.55398	2.95119	0.25195
648791.39	4185801.28	648791.39_4185801.28	0.08279	0.78629	0.37018	0.03894	0.2353	1.56225	2.88116	0.25037
648811.39	4185801.28	648811.39_4185801.28	0.08309	0.76709	0.36529	0.03915	0.23752	1.56962	2.80745	0.24861
648831.39	4185801.28	648831.39_4185801.28	0.08347	0.74867	0.36087	0.03928	0.24013	1.57735	2.73331	0.24681
648851.39	4185801.28	648851.39_4185801.28	0.08385	0.73086	0.35704	0.03931	0.24285	1.58259	2.65367	0.24489
648711.39	4185821.28	648711.39_4185821.28	0.08269	0.85134	0.38194	0.03745	0.23342	1.60918	2.82508	0.2499
648731.39	4185821.28	648731.39_4185821.28	0.08294	0.82978	0.37569	0.03774	0.23507	1.6272	2.76177	0.24877
648751.39	4185821.28	648751.39_4185821.28	0.08321	0.80903	0.36945	0.03804	0.2369	1.64281	2.70219	0.24743
648771.39	4185821.28	648771.39_4185821.28	0.08347	0.78938	0.36385	0.03833	0.23883	1.65398	2.64396	0.24598
648791.39	4185821.28	648791.39_4185821.28	0.08373	0.77055	0.35869	0.03857	0.2409	1.66087	2.58335	0.24431
648811.39	4185821.28	648811.39_4185821.28	0.08406	0.75242	0.3539	0.03876	0.24335	1.66768	2.52459	0.2426
648831.39	4185821.28	648831.39_4185821.28	0.08441	0.73499	0.34964	0.03886	0.24604	1.67282	2.46268	0.2408
648711.39	4185841.28	648711.39_4185841.28	0.08363	0.83209	0.36996	0.03711	0.2387	1.72072	2.55261	0.24412
648731.39	4185841.28	648731.39_4185841.28	0.08386	0.81185	0.36411	0.0374	0.24037	1.73654	2.49063	0.24292
648751.39	4185841.28	648751.39_4185841.28	0.08413	0.79244	0.35837	0.0377	0.24232	1.75067	2.43444	0.24161
648771.39	4185841.28	648771.39_4185841.28	0.08439	0.77377	0.3529	0.03797	0.24442	1.76048	2.38047	0.2401
648791.39	4185841.28	648791.39_4185841.28	0.08469	0.75585	0.34779	0.0382	0.24678	1.7678	2.33006	0.23849
648811.39	4185841.28	648811.39_4185841.28	0.08504	0.73865	0.34315	0.03837	0.24944	1.77332	2.28154	0.23679
648711.39	4185861.28	648711.39_4185861.28	0.0846	0.8148	0.35859	0.03677	0.24421	1.84309	2.31922	0.23853
648731.39	4185861.28	648731.39_4185861.28	0.08483	0.79554	0.35306	0.03707	0.24603	1.85774	2.26178	0.23731
648751.39	4185861.28	648751.39_4185861.28	0.08509	0.77704	0.34762	0.03736	0.24809	1.86968	2.20836	0.23596
648771.39	4185861.28	648771.39_4185861.28	0.08537	0.75927	0.34238	0.03762	0.25042	1.87853	2.15944	0.23448
648791.39	4185861.28	648791.39_4185861.28	0.08569	0.74218	0.33747	0.03783	0.253	1.88434	2.11457	0.23289
648711.39	4185881.28	648711.39_4185881.28	0.08563	0.79983	0.34782	0.03646	0.25008	1.97933	2.11972	0.2332
648731.39	4185881.28	648731.39_4185881.28	0.08583	0.78112	0.34259	0.03674	0.25195	1.99006	2.0647	0.23188
648751.39	4185881.28	648751.39_4185881.28	0.08609	0.76326	0.3374	0.03703	0.25418	1.99981	2.015	0.23052
648731.39	4185901.28	648731.39_4185901.28	0.08683	0.76883	0.33263	0.03642	0.25811	2.13386	1.89307	0.22663
CONCUNIT ug	/m^3	CONCUNIT ug_/m^3								
DEPUNIT g/m	^2	DEPUNIT g/m_^2								

Mossdale Construction HRA

Summary of AERMOD Source Outputs for All Offsite Receptors - Part 3

X	Y	Lookup	ID 8e	ID 11	ID 12	ID 15	ID 13	ID 14 & 16	AR15	AR17	AR18	AR19
				Construction						Truck Routes		
648265.45	4186431.83	648265.45_4186431.83	0.04574	0.04738	0.03874	0.03259	0.03997	0.03539	0.04574	0.02764	0.02337	0.02748
648225.45	4186711.83	648225.45_4186711.83	0.04157	0.04295	0.03546	0.03114	0.03623	0.03262	0.04157	0.02694	0.02286	0.02647
655197.91	4180791.63	655197.91_4180791.63	0.10826	0.09656	0.14472	3.67386	0.07001	0.13922	0.10826	0.90552	4.13164	2.34602
655217.91	4180791.63	655217.91_4180791.63	0.10754	0.09596	0.14351	3.81574	0.06966	0.13806	0.10754	0.88183	3.92717	2.50093
655237.91	4180791.63	655237.91_4180791.63	0.10682	0.09537	0.14231	3.93651	0.06932	0.13692	0.10682	0.85905	3.73453	2.67618
655257.91	4180791.63	655257.91_4180791.63	0.10612	0.09469	0.14108	4.03871	0.06898	0.1358	0.10612	0.83719	3.55321	2.87574
655277.91	4180791.63	655277.91_4180791.63	0.10542	0.09411	0.13991	4.12912	0.06864	0.13469	0.10542	0.8162	3.38248	3.10446
655297.91	4180791.63	655297.91_4180791.63	0.10472	0.09354	0.13867	4.21811	0.06831	0.1336	0.10472	0.79601	3.22188	3.36789
655317.91	4180791.63	655317.91_4180791.63	0.10404	0.09297	0.13754	4.31666	0.06798	0.13252	0.10404	0.77661	3.07081	3.67356
655337.91	4180791.63	655337.91_4180791.63	0.10337	0.09241	0.13643	4.43769	0.06765	0.13146	0.10337	0.75794	2.92873	4.03129
655357.91	4180791.63	655357.91_4180791.63	0.1027	0.09185	0.13533	4.59849	0.06733	0.13041	0.1027	0.73998	2.79517	4.45533
655377.91	4180791.63	655377.91_4180791.63	0.10203	0.09129	0.13425	4.82536	0.06701	0.12938	0.10203	0.72268	2.66951	4.96648
655397.91	4180791.63	655397.91_4180791.63	0.10137	0.09071	0.13314	5.16536	0.06668	0.12835	0.10137	0.70593	2.55081	5.5947
655417.91	4180791.63	655417.91_4180791.63	0.10066	0.09015	0.132	5.72738	0.06635	0.12733	0.10066	0.68976	2.43892	6.38625
655437.91	4180791.63	655437.91_4180791.63	0.10002	0.08959	0.13094	6.80033	0.06603	0.12632	0.10002	0.67418	2.33385	7.41579
655457.91	4180791.63	655457.91_4180791.63	0.09937	0.08904	0.12988	9.41737	0.06571	0.12533	0.09937	0.6592	2.23522	8.81236
655197.91	4180811.63	655197.91_4180811.63	0.10835	0.09663	0.14461	4.32215	0.07005	0.13896	0.10835	0.90753	4.29358	2.47941
655217.91	4180811.63	655217.91_4180811.63	0.10763	0.09603	0.14339	4.46481	0.0697	0.13781	0.10763	0.88361	4.06882	2.64865
655237.91	4180811.63	655237.91_4180811.63	0.10692	0.09535	0.1422	4.57315	0.06936	0.13667	0.10692	0.86067	3.85852	2.84069
655257.91	4180811.63	655257.91_4180811.63	0.1062	0.09476	0.14096	4.65772	0.06902	0.13555	0.1062	0.83865	3.66182	3.06017
655277.91	4180811.63	655277.91_4180811.63	0.1055	0.09417	0.13971	4.73084	0.06868	0.13444	0.1055	0.81749	3.47769	3.31299
655297.91	4180811.63	655297.91_4180811.63	0.10481	0.09359	0.13857	4.80564	0.06835	0.13335	0.10481	0.79718	3.30545	3.6063
655317.91	4180811.63	655317.91_4180811.63	0.10413	0.09302	0.13744	4.89438	0.06802	0.13228	0.10413	0.77765	3.14427	3.94905
655337.91	4180811.63	655337.91_4180811.63	0.10345	0.09246	0.13632	5.01096	0.06769	0.13121	0.10345	0.75886	2.9933	4.35353
655357.91	4180811.63	655357.91_4180811.63	0.10278	0.0919	0.13522	5.17559	0.06736	0.13017	0.10278	0.7408	2.85206	4.83708
655377.91	4180811.63	655377.91_4180811.63	0.10212	0.0913	0.1341	5.41521	0.06703	0.12912	0.10212	0.72332	2.71908	5.42421
655397.91	4180811.63	655397.91_4180811.63	0.10139	0.09073	0.13295	5.78621	0.0667	0.12809	0.10139	0.70645	2.59426	6.15283
655417.91	4180811.63	655417.91_4180811.63	0.10073	0.09017	0.13187	6.40237	0.06637	0.12707	0.10073	0.69019	2.47734	7.08164
655437.91	4180811.63	655437.91_4180811.63	0.10009	0.08961	0.13077	7.55079	0.06604	0.12607	0.10009	0.67456	2.36793	8.30691
655457.91	4180811.63	655457.91_4180811.63	0.09937	0.08907	0.1297	10.04914	0.06572	0.12508	0.09937	0.65949	2.26543	9.99143
655197.91	4180831.63	655197.91_4180831.63	0.10844	0.09669	0.14448	5.20954	0.07008	0.13869	0.10844	0.90895	4.44637	2.61038
655217.91	4180831.63	655217.91_4180831.63	0.10772	0.09608	0.14327	5.3298	0.06974	0.13754	0.10772	0.88486	4.20147	2.79393
655237.91	4180831.63	655237.91_4180831.63	0.10701	0.09539	0.14201	5.40905	0.06939	0.13641	0.10701	0.86175	3.97383	3.00253
655257.91	4180831.63	655257.91_4180831.63	0.1063	0.09481	0.14083	5.46744	0.06905	0.13529	0.1063	0.83959	3.76223	3.24173
655277.91	4180831.63	655277.91_4180831.63	0.1056	0.09422	0.13959	5.51989	0.06871	0.13418	0.1056	0.81832	3.56523	3.51846
655297.91	4180831.63	655297.91_4180831.63	0.10491	0.09365	0.13844	5.58004	0.06838	0.1331	0.10491	0.7979	3.38191	3.84127
655317.91	4180831.63	655317.91_4180831.63	0.10422	0.09308	0.13731	5.65871	0.06805	0.13202	0.10422	0.77827	3.21106	4.22114
655337.91	4180831.63	655337.91_4180831.63	0.10354	0.09251	0.1362	5.77056	0.06772	0.13096	0.10354	0.75941	3.05186	4.67256
655357.91	4180831.63	655357.91_4180831.63	0.10287	0.09191	0.13507	5.92958	0.06738	0.12991	0.10287	0.74118	2.90278	5.21501
655377.91	4180831.63	655377.91_4180831.63	0.10213	0.09133	0.1339	6.16345	0.06705	0.12886	0.10213	0.72356	2.76308	5.87663
655397.91	4180831.63	655397.91_4180831.63	0.10146	0.09075	0.13279	6.52738	0.06671	0.12783	0.10146	0.7066	2.63276	6.702
655417.91	4180831.63	655417.91_4180831.63	0.10073	0.09019	0.13163	7.1307	0.06638	0.12681	0.10073	0.69029	2.51118	7.75989
655437.91	4180831.63	655437.91_4180831.63	0.10003	0.08964	0.13057	8.21293	0.06605	0.12581	0.10003	0.6746	2.3978	9.16106
655457.91	4180831.63	655457.91_4180831.63	0.09939	0.08909	0.12953	10.29486	0.06573	0.12483	0.09939	0.65951	2.29196	11.09375
655197.91	4180851.63	655197.91_4180851.63	0.10855	0.09675	0.14433	6.49149	0.07011	0.13841	0.10855	0.90979	4.58753	2.73826
655217.91	4180851.63	655217.91_4180851.63	0.10782	0.09605	0.14306	6.56533	0.06977	0.13727	0.10782	0.88556	4.3234	2.93619
655237.91	4180851.63	655237.91_4180851.63	0.10711	0.09546	0.14187	6.60372	0.06942	0.13614	0.10711	0.86235	4.07936	3.16154
655257.91	4180851.63	655257.91_4180851.63	0.1064	0.09487	0.14062	6.62919	0.06908	0.13502	0.1064	0.84009	3.8536	3.4207
655277.91	4180851.63	655277.91_4180851.63	0.10569	0.09428	0.13946	6.65521	0.06874	0.13392	0.10569	0.81871	3.64435	3.7215
655297.91	4180851.63	655297.91_4180851.63	0.105	0.0937	0.13831	6.69463	0.06841	0.13283	0.105	0.79819	3.45056	4.07393
655317.91	4180851.63	655317.91_4180851.63	0.10431	0.09313	0.13719	6.75726	0.06807	0.13176	0.10431	0.7785	3.27084	4.49064
655337.91	4180851.63	655337.91_4180851.63	0.10362	0.09253	0.13605	6.84438	0.06773	0.13069	0.10362	0.75945	3.10302	4.98686
655357.91	4180851.63	655357.91_4180851.63	0.10288	0.09194	0.13486	6.97495	0.06739	0.12963	0.10288	0.74109	2.94673	5.58429
655377.91	4180851.63	655377.91_4180851.63	0.1022	0.09136	0.13368	7.17853	0.06705	0.12859	0.1022	0.72342	2.80141	6.31486
655397.91	4180851.63	655397.91_4180851.63	0.10146	0.09077	0.13251	7.50883	0.06672	0.12756	0.10146	0.70641	2.66621	7.2264
655417.91	4180851.63	655417.91_4180851.63	0.10075	0.09021	0.13143	8.06432	0.06639	0.12654	0.10075	0.69007	2.54057	8.39507
655437.91	4180851.63	655437.91_4180851.63	0.10009	0.08966	0.13039	9.00365	0.06606	0.12555	0.10009	0.67439	2.42391	9.9468
655457.91	4180851.63	655457.91_4180851.63	0.09945	0.08912	0.12936	10.72291	0.06575	0.12457	0.09945	0.65931	2.31524	12.08964
655197.91	4180871.63	655197.91_4180871.63	0.10865	0.09672	0.14412	8.50931	0.07014	0.13813	0.10865	0.91006	4.71557	2.86393
655217.91	4180871.63	655217.91_4180871.63	0.10792	0.09611	0.14291	8.51045	0.06979	0.13699	0.10792	0.88575	4.43327	3.07658
655237.91	4180871.63	655237.91_4180871.63	0.1072	0.09552	0.14166	8.49342	0.06945	0.13586	0.1072	0.86246	4.17386	3.31909
655257.91	4180871.63	655257.91_4180871.63	0.10649	0.09493	0.14048	8.47303	0.06911	0.13474	0.10649	0.84011	3.93481	3.5983
655277.91	4180871.63	655277.91_4180871.63	0.10579	0.09435	0.13932	8.46269	0.06877	0.13365	0.10579	0.81867	3.71442	3.92287
655297.91	4180871.63	655297.91_4180871.63	0.10509	0.09377	0.13818	8.46993	0.06843	0.13256	0.10509	0.7981	3.51109	4.30394
655317.91	4180871.63	655317.91_4180871.63	0.10439	0.09314	0.13703	8.48142	0.06809	0.13148	0.10439	0.7782	3.32175	4.75367
655337.91	4180871.63	655337.91_4180871.63	0.10363	0.09254	0.13578	8.51355	0.06774	0.1304	0.10363	0.75902	3.14616	5.28869
655357.91	4180871.63	655357.91_4180871.63	0.10294	0.09195	0.13459	8.59889	0.0674	0.12935	0.10294	0.74063	2.98411	5.93466
655377.91	4180871.63	655377.91_4180871.63	0.1022	0.09137	0.13341	8.75946	0.06706	0.12831	0.1022	0.72295	2.83401	6.7249
655397.91	4180871.63	655397.91_4180871.63	0.10148	0.09081	0.13232	9.04589	0.06673	0.12729	0.10148	0.70599	2.69508	7.71349
655417.91	4180871.63	655417.91_4180871.63	0.10082	0.09024	0.13125	9.51	0.0664	0.12628	0.10082	0.68965	2.56599	8.97963
655437.91	4180871.63	655437.91_4180871.63	0.10016	0.0897	0.1302	10.28037	0.06608	0.12529	0.10016	0.67396	2.44623	10.65871
655457.91	4180871.63	655457.91_4180871.63	0.09953	0.08916	0.12918	11.70325	0.06576	0.12431	0.09953	0.65888	2.335	12.97313
655030.86	4180794.28	655030.86_4180794.28	0.11463	0.10179	0.15567	2.47477	0.07299	0.14947	0.11463	1.14958	6.5116	1.52646
655050.86	4180794.28	655050.86_4180794.28	0.11383	0.10114	0.1543	2.58025	0.07262	0.14817	0.11383	1.11537	6.15673	1.59763
655070.86	4180794.28	655070.86_4180794.28	0.11305	0.1005	0.15295	2.71133	0.07226	0.14689	0.11305	1.0827	5.82415	1.6746
655090.86	4180794.28	655090.86_4180794.28	0.11227	0.09986	0.15162	2.85914	0.0719	0.14563	0.11227	1.05149	5.51303	1.75811
655110.86	4180794.28	655110.86_4180794.28	0.11151	0.09923	0.15032	3.02769	0.07154	0.14439	0.11151	1.02165	5.22226	1.84903
655130.86	4180794.28	655130.86_4180794.28	0.11075	0.09861	0.14903	3.2072	0.07118	0.14317	0.11075	0.99308	4.94978	1.94855
655150.86	4180794.28	655150.86_4180794.28	0.11	0.09799	0.14762	3.37241	0.07083	0.14196	0.11	0.96574	4.6945	2.05778
655030.86	4180814.28	655030.86_4180814.28	0.11473	0.10187	0.15555	2.72873	0.07303	0.14919	0.11473	1.15421	7.03079	1.59017
655050.86	4180814.28	655050.86_4180814.28	0.11394	0.10122	0.15418	2.87607	0.07267	0.1479	0.11394	1.11956	6.60356	1.66656
655070.86	4180814.28	655070.86_4180814.28	0.11315	0.10057	0.15283	3.05468	0.0723	0.14662	0.11315	1.08648	6.21033	1.74937
655090.86	4180814.28	655090.86_4180814.28	0.11238	0.09993	0.15151	3.25898	0.07194	0.14536	0.11238	1.05489	5.84801	1.83942
655110.86	4180814.28	655110.86_4180814.28	0.11161	0.0993	0.15006	3.49773	0.07158	0.14412	0.11161	1.02471	5.51339	1.93768
655130.86	4180814.28	655130.86_4180814.28	0.11085	0.09868	0.14878	3.73818	0.07122	0.1429	0.11085	0.99585	5.20354	2.04539
655150.86	4180814.28	655150.86_4180814.28	0.1101	0.09806	0.14751	3.95821	0.07087	0.14169	0.1101	0.96821	4.91567	2.16397
655030.86	4180834.28	655030.86_4180834.28	0.11484	0.10194	0.15528	3.04529	0.07307	0.1489	0.11484	1.15784	7.5469	1.65246
655050.86	4180834.28	655050.86_4180834.28	0.11404	0.10129	0.15391	3.25757	0.07271	0.14761	0.11404	1.1228	7.04427	1.73403
655070.86	4180834.28	655070.86_4180834.28	0.11325	0.10064	0.15257	3.5126	0.07234	0.14633	0.11325	1.08936	6.58857	1.82259
655090.86	4180834.28	655090.86_4180834.28	0.11248	0.1	0.15124	3.81909	0.07198	0.14508	0.11248	1.05746	6.17389	1.919
655110.86	4180834.28	655110.86_4180834.28	0.11171	0.09937	0.14993	4.17724	0.07162	0.14384	0.11171	1.02698	5.79487	2.02446
655130.86	4180834.28	655130.86_4180834.28	0.11095	0.09875	0.14865	4.51688	0.07126	0.14262	0.11095	0.99785	5.44709	2.14015
655150.86	4180834.28	655150.86_4180834.28	0.1102	0.09813	0.14738	4.82621	0.07091	0.14142	0.1102	0.97001	5.12699	2.26781
655030.86	4180854.28	655030.86_4180854.28	0.11494	0.10201	0.15513	3.46168	0.07311	0.1486	0.11494	1.16048	8.04887	1.7123

655050.86	4180854.28	655050.86_4180854.28	0.11415	0.10136	0.15376	3.78223	0.07274	0.14731	0.11415	1.1251	7.4704	1.79895
655070.86	4180854.28	655070.86_4180854.28	0.11336	0.10072	0.15242	4.1791	0.07237	0.14604	0.11336	1.09139	6.95216	1.89309
655090.86	4180854.28	655090.86_4180854.28	0.11257	0.10007	0.15109	4.69446	0.07201	0.14479	0.11257	1.05921	6.48524	1.99574
655110.86	4180854.28	655110.86_4180854.28	0.1118	0.09943	0.14978	5.27312	0.07165	0.14355	0.1118	1.02849	6.06213	2.10818
655130.86	4180854.28	655130.86_4180854.28	0.11104	0.09881	0.1485	5.78839	0.07129	0.14233	0.11104	0.99917	5.67705	2.23185
655150.86	4180854.28	655150.86_4180854.28	0.1103	0.09818	0.14723	6.20848	0.07094	0.14113	0.1103	0.97112	5.32478	2.36855
655030.86	4180874.28	655030.86_4180874.28	0.11504	0.10208	0.15496	4.04839	0.07314	0.14829	0.11504	1.16217	8.52599	1.76924
655050.86	4180874.28	655050.86_4180874.28	0.11424	0.10132	0.1536	4.56954	0.07277	0.147	0.11424	1.1265	7.87298	1.86098
655070.86	4180874.28	655070.86_4180874.28	0.11346	0.10067	0.15225	5.28842	0.0724	0.14574	0.11346	1.09255	7.29419	1.96071
655090.86	4180874.28	655090.86_4180874.28	0.11268	0.10003	0.15093	6.3021	0.07204	0.14449	0.11268	1.06018	6.77679	2.06964
655110.86	4180874.28	655110.86_4180874.28	0.11191	0.0994	0.14956	7.33668	0.07168	0.14326	0.11191	1.02928	6.31089	2.1891
655130.86	4180874.28	655130.86_4180874.28	0.11115	0.09877	0.14828	8.10973	0.07132	0.14204	0.11115	0.99977	5.88935	2.32081
655150.86	4180874.28	655150.86_4180874.28	0.11039	0.09816	0.14701	8.57407	0.07097	0.14084	0.11039	0.97161	5.50665	2.46667
654770.51	4180915.57	654770.51_4180915.57	0.12663	0.11147	0.17451	2.81224	0.07835	0.16617	0.12663	1.86202	123.17729	1.05525
654790.51	4180915.57	654790.51_4180915.57	0.12568	0.11071	0.17283	2.85427	0.07793	0.16461	0.12568	1.78732	75.90573	1.09627
654810.51	4180915.57	654810.51_4180915.57	0.12476	0.10995	0.17105	2.90443	0.07752	0.16307	0.12476	1.71722	52.06012	1.13992
654830.51	4180915.57	654830.51_4180915.57	0.12384	0.10921	0.16943	2.96456	0.07711	0.16156	0.12384	1.65129	38.81188	1.18641
654850.51	4180915.57	654850.51_4180915.57	0.12294	0.10848	0.16784	3.03721	0.0767	0.16007	0.12294	1.58924	30.6492	1.236
654870.51	4180915.57	654870.51_4180915.57	0.12204	0.10775	0.16628	3.12596	0.0763	0.1586	0.12204	1.53074	25.16871	1.28892
654890.51	4180915.57	654890.51_4180915.57	0.12117	0.10703	0.16474	3.23701	0.0759	0.15716	0.12117	1.47554	21.24667	1.34548
654910.51	4180915.57	654910.51_4180915.57	0.1203	0.10621	0.16316	3.37851	0.0755	0.15574	0.1203	1.42337	18.29697	1.40599
654930.51	4180915.57	654930.51_4180915.57	0.11944	0.10552	0.16166	3.56138	0.07511	0.15434	0.11944	1.37405	15.99839	1.47086
654950.51	4180915.57	654950.51_4180915.57	0.11858	0.10482	0.16019	3.8065	0.07472	0.15296	0.11858	1.32733	14.15497	1.54044
654970.51	4180915.57	654970.51_4180915.57	0.11774	0.10414	0.15875	4.13436	0.07433	0.1516	0.11774	1.28307	12.64594	1.61523
654990.51	4180915.57	654990.51_4180915.57	0.11691	0.10346	0.15732	4.59461	0.07395	0.15027	0.11691	1.24109	11.38842	1.69587
655010.51	4180915.57	655010.51_4180915.57	0.1161	0.10279	0.15592	5.3104	0.07358	0.14895	0.1161	1.20122	10.32344	1.78293
655030.51	4180915.57	655030.51_4180915.57	0.11529	0.10213	0.15448	6.52056	0.0732	0.14765	0.11529	1.16334	9.4099	1.87719
654770.51	4180935.57	654770.51_4180935.57	0.12675	0.11155	0.17413	3.06815	0.07837	0.16578	0.12675	1.86447	126.52291	1.07282
654790.51	4180935.57	654790.51_4180935.57	0.12581	0.11078	0.17246	3.11855	0.07796	0.16422	0.12581	1.78923	79.53715	1.11481
654810.51	4180935.57	654810.51_4180935.57	0.12488	0.10992	0.17082	3.17898	0.07754	0.16269	0.12488	1.7186	55.43965	1.15955
654830.51	4180935.57	654830.51_4180935.57	0.12397	0.10917	0.16914	3.25264	0.07713	0.16118	0.12397	1.65229	41.6298	1.20735
654850.51	4180935.57	654850.51_4180935.57	0.12306	0.10844	0.16755	3.34247	0.07672	0.1597	0.12306	1.58985	32.88004	1.25839
654870.51	4180935.57	654870.51_4180935.57	0.12217	0.10772	0.16599	3.45372	0.07632	0.15824	0.12217	1.53103	26.923	1.313
654890.51	4180935.57	654890.51_4180935.57	0.12128	0.107	0.16445	3.59493	0.07592	0.1568	0.12128	1.47555	22.63185	1.37153
654910.51	4180935.57	654910.51_4180935.57	0.12041	0.10628	0.16287	3.77879	0.07552	0.15538	0.12041	1.42312	19.40208	1.4343
654930.51	4180935.57	654930.51_4180935.57	0.11955	0.10558	0.16139	4.02396	0.07513	0.15399	0.11955	1.37357	16.89039	1.50171
654950.51	4180935.57	654950.51_4180935.57	0.1187	0.10489	0.15992	4.36234	0.07474	0.15261	0.1187	1.32669	14.88392	1.57423
654970.51	4180935.57	654970.51_4180935.57	0.11786	0.10421	0.15848	4.84124	0.07435	0.15126	0.11786	1.28227	13.24669	1.6524
654990.51	4180935.57	654990.51_4180935.57	0.11702	0.10353	0.15706	5.56442	0.07397	0.14993	0.11702	1.24015	11.88665	1.73677
655010.51	4180935.57	655010.51_4180935.57	0.1162	0.10286	0.15566	6.79149	0.07359	0.14861	0.1162	1.2002	10.73965	1.8281
655030.51	4180935.57	655030.51_4180935.57	0.1154	0.1022	0.15428	9.09584	0.07322	0.14732	0.1154	1.16225	9.75854	1.92714
654770.51	4180955.57	654770.51_4180955.57	0.12688	0.11151	0.17381	3.3654	0.07839	0.16537	0.12688	1.86443	127.46993	1.08953
654790.51	4180955.57	654790.51_4180955.57	0.12594	0.11075	0.17208	3.42262	0.07797	0.16382	0.12594	1.78883	80.88576	1.13245
654810.51	4180955.57	654810.51_4180955.57	0.125	0.10999	0.17044	3.49268	0.07756	0.1623	0.125	1.71789	56.88189	1.17828
654830.51	4180955.57	654830.51_4180955.57	0.12408	0.10924	0.16884	3.57919	0.07715	0.16079	0.12408	1.65129	43.03734	1.22727
654850.51	4180955.57	654850.51_4180955.57	0.12318	0.10851	0.16726	3.68627	0.07674	0.15932	0.12318	1.58866	34.18631	1.27973
654870.51	4180955.57	654870.51_4180955.57	0.12229	0.10779	0.1657	3.82003	0.07633	0.15786	0.12229	1.52965	28.07052	1.33598
654890.51	4180955.57	654890.51_4180955.57	0.12141	0.10707	0.16417	3.99262	0.07593	0.15643	0.12141	1.474	23.61165	1.39637
654910.51	4180955.57	654910.51_4180955.57	0.12053	0.10636	0.16266	4.224	0.07554	0.15502	0.12053	1.42148	20.23014	1.46128
654930.51	4180955.57	654930.51_4180955.57	0.11966	0.10565	0.16117	4.54474	0.07514	0.15363	0.11966	1.37183	17.58405	1.53115
654950.51	4180955.57	654950.51_4180955.57	0.11881	0.10496	0.15971	5.00754	0.07475	0.15226	0.11881	1.32487	15.46503	1.60649
654970.51	4180955.57	654970.51_4180955.57	0.11797	0.10428	0.15827	5.71778	0.07437	0.15091	0.11797	1.28039	13.73407	1.68787
654990.51	4180955.57	654990.51_4180955.57	0.11714	0.1036	0.15685	6.90326	0.07398	0.14958	0.11714	1.23822	12.2957	1.7759
655010.51	4180955.57	655010.51_4180955.57	0.11632	0.10292	0.15545	9.01798	0.07361	0.14827	0.11632	1.19824	11.08268	1.87134
655030.51	4180955.57	655030.51_4180955.57	0.11551	0.10226	0.15407	12.84603	0.07323	0.14698	0.11551	1.16025	10.04517	1.97499
654770.51	4180975.57	654770.51_4180975.57	0.127	0.11157	0.17348	3.72433	0.0784	0.16496	0.127	1.86172	127.1424	1.10566
654790.51	4180975.57	654790.51_4180975.57	0.12606	0.11081	0.17182	3.78562	0.07798	0.16341	0.12606	1.78595	81.24683	1.14955
654810.51	4180975.57	654810.51_4180975.57	0.12513	0.11006	0.1702	3.86315	0.07757	0.16189	0.12513	1.71495	57.54807	1.19646
654830.51	4180975.57	654830.51_4180975.57	0.12421	0.10931	0.16859	3.96091	0.07716	0.1604	0.12421	1.64828	43.75413	1.24663
654850.51	4180975.57	654850.51_4180975.57	0.1233	0.10858	0.16701	4.08434	0.07675	0.15893	0.1233	1.58559	34.89379	1.30044
654870.51	4180975.57	654870.51_4180975.57	0.12241	0.10785	0.16546	4.24254	0.07634	0.15748	0.12241	1.52655	28.74743	1.35821
654890.51	4180975.57	654890.51_4180975.57	0.12153	0.10714	0.16393	4.45271	0.07594	0.15605	0.12153	1.4709	24.23646	1.42034
654910.51	4180975.57	654910.51_4180975.57	0.12065	0.10643	0.16242	4.74705	0.07555	0.15464	0.12065	1.41838	20.78898	1.48726
654930.51	4180975.57	654930.51_4180975.57	0.11979	0.10572	0.16094	5.18098	0.07515	0.15326	0.11979	1.36875	18.07449	1.55941
654950.51	4180975.57	654950.51_4180975.57	0.11893	0.10503	0.15948	5.87124	0.07476	0.15189	0.11893	1.32178	15.88879	1.63737
654970.51	4180975.57	654970.51_4180975.57	0.11809	0.10431	0.15804	7.07745	0.07437	0.15054	0.11809	1.27734	14.09746	1.7217
654990.51	4180975.57	654990.51_4180975.57	0.11726	0.10363	0.15663	9.64235	0.07399	0.14922	0.11726	1.2352	12.60376	1.81309
655010.51	4180975.57	655010.51_4180975.57	0.11644	0.10296	0.15523	14.14809	0.07361	0.14791	0.11644	1.19524	11.34153	1.91235
655030.51	4180975.57	655030.51_4180975.57	0.11563	0.1023	0.15386	19.28898	0.07323	0.14662	0.11563	1.15733	10.26165	2.02033
654781.96	4181088.17	654781.96_4181088.17	0.12727	0.11164	0.17092	12.72015	0.07814	0.16162	0.12727	1.75329	93.99227	1.2143
654066.45	4180911.91	654066.45_4180911.91	0.16911	0.14521	0.25707	3.62281	0.09598	0.24227	0.16911	26.99823	0.90438	0.40034
654086.45	4180911.91	654086.45_4180911.91	0.16759	0.14405	0.25387	3.42628	0.0954	0.23935	0.16759	22.49562	0.94261	0.40881
654106.45	4180911.91	654106.45_4180911.91	0.16609	0.1429	0.25074	3.26454	0.09482	0.23648	0.16609	19.19107	0.9833	0.41758
654186.45	4180911.91	654186.45_4180911.91	0.1603	0.13843	0.23884	2.86723	0.09255	0.22559	0.1603	11.69983	1.17523	0.4559
654206.45	4180911.91	654206.45_4180911.91	0.15891	0.13733	0.23601	2.80981	0.092	0.223	0.15891	10.57712	1.23172	0.46636
654226.45	4180911.91	654226.45_4180911.91	0.15754	0.13626	0.23324	2.76277	0.09145	0.22046	0.15754	9.62104	1.29233	0.47722
654246.45	4180911.91	654246.45_4180911.91	0.15618	0.13521	0.23053	2.72428	0.09091	0.21796	0.15618	8.79732	1.35746	0.48845
654266.45	4180911.91	654266.45_4180911.91	0.15485	0.13416	0.22786	2.6925	0.09037	0.21552	0.15485	8.07913	1.42772	0.50013
654286.45	4180911.91	654286.45_4180911.91	0.15354	0.13314	0.22525	2.66626	0.08984	0.21312	0.15354	7.44718	1.50378	0.51225
654306.45	4180911.91	654306.45_4180911.91	0.15224	0.13212	0.22269	2.64472	0.08932	0.21076	0.15224	6.88675	1.58635	0.52482
654326.45	4180911.91	654326.45_4180911.91	0.15097	0.13112	0.22017	2.62691	0.0888	0.20845	0.15097	6.38598	1.67656	0.53791
654346.45	4180911.91	654346.45_4180911.91	0.14971	0.13013	0.21771	2.61245	0.08828	0.20618	0.14971	5.9364	1.77545	0.55148
654366.45	4180911.91	654366.45_4180911.91	0.14847	0.12916	0.21529	2.6008	0.08777	0.20395	0.14847	5.53079	1.88443	0.5656
654386.45	4180911.91	654386.45_4180911.91	0.14725	0.12819	0.21291	2.59154	0.08727	0.20176	0.14725	5.16334	2.00534	0.58031
654406.45	4180911.91	654406.45_4180911.91	0.14604	0.12724	0.21058	2.5845	0.08676	0.19961	0.14604	4.82955	2.14013	0.59563
654426.45	4180911.91	654426.45_4180911.91	0.14485	0.12631	0.2083	2.57963	0.08627	0.1975	0.14485	4.52588	2.29114	0.61158
654446.45	4180911.91	654446.45_4180911.91	0.14368	0.12538	0.20605	2.5764	0.08578	0.19542	0.14368	4.24856	2.46238	0.62823
654466.45	4180911.91	654466.45_4180911.91	0.14252	0.12446	0.20385	2.57495	0.08529	0.19338	0.14252	3.99503	2.65798	0.6456
654486.45	4180911.91	654486.45_4180911.91	0.14138	0.12356	0.20168	2.57503	0.08481	0.19138	0.14138	3.76278	2.8841	0.66374
654506.45	4180911.91	654506.45_4180911.91	0.14025	0.12266	0.19956	2.57659	0.08434	0.18941	0.14025	3.54964	3.14852	0.68272
654526.45	4180911.91	654526.45_4180911.91	0.13914	0.12178	0.19746	2.57947	0.08386	0.18748	0.13914	3.35368	3.46125	0.70261
654546.45	4180911.91	654546.45_4180911.91	0.13804	0.1209	0.19541	2.58378	0.0834	0.18557	0.13804	3.17324	3.83434	0.72344
654566.45	4180911.91	654566.45_4180911.91	0.13696	0.12003	0.19339	2.58935	0.08293	0.18371	0.13696	3.00684	4.28494	0.74531
654586.45	4180911.91	654586.45_4180911.91	0.1359	0.11918	0.19141	2.59637	0.08247	0.18187	0.1359	2.85311	4.8374	0.76829
654606.45	4180911.91	654606.45_4180911.91	0.13484	0.11833	0.18946	2.60492	0.08202	0.18006	0.13484	2.71091	5.5301	0.79249
654626.45	4180911.91	654626.45_4180911.91	0.13379	0.11745	0.18753	2.61509	0.08156	0.17829	0.13379	2.57891	6.42708	0.81808
654646.45	4180911.91	654646.45_4180911.91	0.13275	0.11659	0.18563	2.62669	0.08109	0.17655	0.13275	2.4559	7.62661	0.8454
654666.45	4180911.91	654666.45_4180911.91	0.13172	0.11575	0.18376	2.64087	0.08064	0.17483	0.13172	2.34169	9.31682	0.87412
654686.45	4180911.91	654686.45_4180911.91	0.13071	0.11483	0.18192	2.65753	0.08018	0.17314	0.13071	2.23547	11.88474	0.90437
654706.45	4180911.91	654706.45_4180911.91	0.12971	0.11401	0.18011	2.67732	0.07974	0.17145	0.12971	2.13642	16.25695	0.93633

654726.45	4180911.91	654726.45_4180911.91	0.12872	0.11319	0.17834	2.70087	0.0793	0.16979	0.12872	2.04399	25.43332	0.97016
654746.45	4180911.91	654746.45_4180911.91	0.12776	0.1124	0.1766	2.72891	0.07886	0.16816	0.12776	1.95774	55.91747	1.00595
654066.45	4180931.91	654066.45_4180931.91	0.16931	0.14538	0.25676	3.91326	0.09604	0.24163	0.16931	28.682	0.93161	0.40519
654086.45	4180931.91	654086.45_4180931.91	0.16778	0.14422	0.25356	3.68178	0.09545	0.23872	0.16778	23.85838	0.97199	0.41377
654106.45	4180931.91	654106.45_4180931.91	0.16628	0.14307	0.25044	3.49956	0.09487	0.23587	0.16628	20.29467	1.01508	0.42265
654186.45	4180931.91	654186.45_4180931.91	0.16049	0.13857	0.23855	3.081	0.0926	0.22502	0.16049	12.21097	1.22002	0.46154
654206.45	4180931.91	654206.45_4180931.91	0.15909	0.13748	0.23572	3.02334	0.09205	0.22244	0.15909	11.00575	1.2809	0.47218
654226.45	4180931.91	654226.45_4180931.91	0.15771	0.13641	0.23296	2.97685	0.0915	0.21991	0.15771	9.98271	1.34634	0.48319
654246.45	4180931.91	654246.45_4180931.91	0.15636	0.13535	0.23024	2.93894	0.09096	0.21742	0.15636	9.10229	1.41697	0.49465
654266.45	4180931.91	654266.45_4180931.91	0.15503	0.13431	0.22758	2.90817	0.09042	0.21498	0.15503	8.33691	1.49323	0.50652
654286.45	4180931.91	654286.45_4180931.91	0.15372	0.13328	0.22497	2.88291	0.08989	0.21259	0.15372	7.66474	1.57604	0.51887
654306.45	4180931.91	654306.45_4180931.91	0.15242	0.13226	0.22241	2.86235	0.08936	0.21024	0.15242	7.07016	1.66614	0.53168
654326.45	4180931.91	654326.45_4180931.91	0.15114	0.13126	0.2199	2.84557	0.08884	0.20794	0.15114	6.54058	1.76473	0.545
654346.45	4180931.91	654346.45_4180931.91	0.14988	0.13027	0.21744	2.83181	0.08833	0.20568	0.14988	6.06627	1.87323	0.55887
654366.45	4180931.91	654366.45_4180931.91	0.14864	0.1293	0.21502	2.82084	0.08782	0.20345	0.14864	5.63987	1.99308	0.57327
654386.45	4180931.91	654386.45_4180931.91	0.14741	0.12833	0.21265	2.81206	0.08731	0.20127	0.14741	5.25493	2.12644	0.58829
654406.45	4180931.91	654406.45_4180931.91	0.1462	0.12738	0.21032	2.80543	0.08681	0.19913	0.1462	4.90666	2.27561	0.60392
654426.45	4180931.91	654426.45_4180931.91	0.14501	0.12644	0.20804	2.80072	0.08631	0.19702	0.14501	4.59053	2.44363	0.62022
654446.45	4180931.91	654446.45_4180931.91	0.14383	0.12551	0.20579	2.79768	0.08582	0.19496	0.14383	4.3029	2.63465	0.63723
654466.45	4180931.91	654466.45_4180931.91	0.14268	0.12459	0.20359	2.79658	0.08534	0.19292	0.14268	4.04082	2.85352	0.65496
654486.45	4180931.91	654486.45_4180931.91	0.14154	0.12367	0.20143	2.79696	0.08485	0.19093	0.14154	3.80127	3.10788	0.67352
654506.45	4180931.91	654506.45_4180931.91	0.14041	0.12277	0.1993	2.79908	0.08438	0.18896	0.14041	3.58211	3.40667	0.69291
654526.45	4180931.91	654526.45_4180931.91	0.1393	0.12189	0.19721	2.80276	0.0839	0.18703	0.1393	3.3811	3.76239	0.71319
654546.45	4180931.91	654546.45_4180931.91	0.13819	0.12101	0.19516	2.80784	0.08343	0.18514	0.13819	3.19636	4.19195	0.7345
654566.45	4180931.91	654566.45_4180931.91	0.13711	0.12014	0.19314	2.81449	0.08297	0.18328	0.13711	3.02644	4.71662	0.75681
654586.45	4180931.91	654586.45_4180931.91	0.13604	0.11929	0.19116	2.82266	0.08251	0.18144	0.13604	2.86978	5.36865	0.78025
654606.45	4180931.91	654606.45_4180931.91	0.13498	0.11839	0.18921	2.8321	0.08205	0.17965	0.13498	2.72486	6.20175	0.80502
654626.45	4180931.91	654626.45_4180931.91	0.13392	0.11753	0.18727	2.84258	0.08158	0.17789	0.13392	2.59016	7.29408	0.83143
654646.45	4180931.91	654646.45_4180931.91	0.13287	0.11667	0.18537	2.85527	0.08111	0.17614	0.13287	2.46533	8.78672	0.8592
654666.45	4180931.91	654666.45_4180931.91	0.13184	0.11573	0.1835	2.86961	0.08065	0.17442	0.13184	2.34943	10.94435	0.88843
654686.45	4180931.91	654686.45_4180931.91	0.13083	0.11488	0.18166	2.88732	0.0802	0.1727	0.13083	2.24169	14.31597	0.91925
654706.45	4180931.91	654706.45_4180931.91	0.12983	0.11406	0.17986	2.90974	0.07975	0.17102	0.12983	2.14162	20.25399	0.95176
654726.45	4180931.91	654726.45_4180931.91	0.12884	0.11325	0.17809	2.93714	0.07931	0.16938	0.12884	2.0484	32.76679	0.98618
654746.45	4180931.91	654746.45_4180931.91	0.12787	0.11246	0.17636	2.97008	0.07888	0.16776	0.12787	1.96138	67.06628	1.0227
654066.45	4180951.91	654066.45_4180951.91	0.1695	0.14554	0.25641	4.21567	0.09609	0.24098	0.1695	29.70756	0.95853	0.40984
654086.45	4180951.91	654086.45_4180951.91	0.16797	0.14437	0.25323	3.9572	0.09551	0.23807	0.16797	24.77516	1.0008	0.4185
654106.45	4180951.91	654106.45_4180951.91	0.16648	0.14321	0.2501	3.7608	0.09492	0.23523	0.16648	21.08575	1.04621	0.4275
654186.45	4180951.91	654186.45_4180951.91	0.16068	0.13872	0.23823	3.33504	0.09265	0.22443	0.16068	12.62577	1.26355	0.46684
654206.45	4180951.91	654206.45_4180951.91	0.15928	0.13764	0.23541	3.2789	0.0921	0.22185	0.15928	11.35815	1.32857	0.4776
654226.45	4180951.91	654226.45_4180951.91	0.1579	0.13656	0.23264	3.23401	0.09155	0.21933	0.1579	10.2811	1.39874	0.48877
654246.45	4180951.91	654246.45_4180951.91	0.15655	0.1355	0.22993	3.19777	0.091	0.21686	0.15655	9.35442	1.4747	0.50037
654266.45	4180951.91	654266.45_4180951.91	0.15521	0.13446	0.22727	3.16864	0.09047	0.21443	0.15521	8.54927	1.55695	0.51242
654286.45	4180951.91	654286.45_4180951.91	0.1539	0.13343	0.22467	3.14508	0.08994	0.21204	0.1539	7.84319	1.64643	0.52493
654306.45	4180951.91	654306.45_4180951.91	0.1526	0.13242	0.22211	3.12583	0.08941	0.20971	0.1526	7.2192	1.74411	0.53796
654326.45	4180951.91	654326.45_4180951.91	0.15131	0.13141	0.2196	3.11022	0.08888	0.20741	0.15131	6.66476	1.8512	0.55151
654346.45	4180951.91	654346.45_4180951.91	0.15005	0.13041	0.21714	3.09776	0.08837	0.20515	0.15005	6.16967	1.96912	0.5656
654366.45	4180951.91	654366.45_4180951.91	0.14881	0.12943	0.21473	3.08765	0.08786	0.20294	0.14881	5.72559	2.09985	0.58026
654386.45	4180951.91	654386.45_4180951.91	0.14758	0.12846	0.21236	3.07983	0.08735	0.20077	0.14758	5.32612	2.2455	0.59553
654406.45	4180951.91	654406.45_4180951.91	0.14637	0.1275	0.21003	3.07375	0.08685	0.19863	0.14637	4.96552	2.4091	0.61147
654426.45	4180951.91	654426.45_4180951.91	0.14518	0.12655	0.20775	3.06954	0.08635	0.19653	0.14518	4.63928	2.59395	0.62808
654446.45	4180951.91	654446.45_4180951.91	0.144	0.12562	0.20551	3.06695	0.08586	0.19447	0.144	4.34332	2.80455	0.6454
654466.45	4180951.91	654466.45_4180951.91	0.14284	0.1247	0.20331	3.06602	0.08537	0.19245	0.14284	4.07418	3.04702	0.66349
654486.45	4180951.91	654486.45_4180951.91	0.14169	0.12379	0.20114	3.06667	0.08489	0.19046	0.14169	3.82887	3.3295	0.68241
654506.45	4180951.91	654506.45_4180951.91	0.14056	0.12289	0.19902	3.06911	0.08441	0.1885	0.14056	3.60486	3.66288	0.70221
654526.45	4180951.91	654526.45_4180951.91	0.13945	0.122	0.19693	3.0733	0.08393	0.18658	0.13945	3.39986	4.06213	0.72294
654546.45	4180951.91	654546.45_4180951.91	0.13835	0.12112	0.19488	3.07926	0.08346	0.18469	0.13835	3.21195	4.54744	0.74466
654566.45	4180951.91	654566.45_4180951.91	0.13726	0.12026	0.19287	3.08702	0.083	0.18283	0.13726	3.0393	5.14617	0.76742
654586.45	4180951.91	654586.45_4180951.91	0.13618	0.11934	0.19088	3.09566	0.08253	0.18102	0.13618	2.87992	5.90168	0.79153
654606.45	4180951.91	654606.45_4180951.91	0.1351	0.11845	0.18891	3.10508	0.08205	0.17923	0.1351	2.7323	6.86805	0.81715
654626.45	4180951.91	654626.45_4180951.91	0.13404	0.11748	0.18698	3.11577	0.08158	0.17746	0.13404	2.5959	8.1454	0.84401
654646.45	4180951.91	654646.45_4180951.91	0.13299	0.11662	0.18507	3.12794	0.08111	0.17569	0.13299	2.46959	9.90229	0.87221
654666.45	4180951.91	654666.45_4180951.91	0.13196	0.11576	0.18321	3.14312	0.08066	0.17396	0.13196	2.35263	12.46287	0.90189
654686.45	4180951.91	654686.45_4180951.91	0.13095	0.11493	0.18138	3.16232	0.08021	0.17226	0.13095	2.24423	16.49018	0.93317
654706.45	4180951.91	654706.45_4180951.91	0.12995	0.11412	0.17959	3.18642	0.07976	0.17059	0.12995	2.14354	23.4969	0.96626
654726.45	4180951.91	654726.45_4180951.91	0.12897	0.11332	0.17769	3.21646	0.07933	0.16896	0.12897	2.04985	37.29894	1.00132
654746.45	4180951.91	654746.45_4180951.91	0.128	0.11253	0.17596	3.25288	0.0789	0.16735	0.128	1.96238	72.11255	1.03857
654186.45	4180971.91	654186.45_4180971.91	0.16087	0.13887	0.23787	3.64975	0.09269	0.22381	0.16087	12.93945	1.30458	0.47178
654206.45	4180971.91	654206.45_4180971.91	0.15948	0.13779	0.23505	3.59661	0.09214	0.22125	0.15948	11.62723	1.37351	0.48265
654226.45	4180971.91	654226.45_4180971.91	0.1581	0.13672	0.23229	3.55446	0.09159	0.21873	0.1581	10.50992	1.44813	0.49393
654246.45	4180971.91	654246.45_4180971.91	0.15673	0.13566	0.22959	3.52082	0.09105	0.21627	0.15673	9.54769	1.52909	0.50565
654266.45	4180971.91	654266.45_4180971.91	0.15539	0.13461	0.22693	3.49385	0.09051	0.21385	0.15539	8.71096	1.61707	0.51784
654286.45	4180971.91	654286.45_4180971.91	0.15408	0.13358	0.22433	3.47214	0.08997	0.21147	0.15408	7.9774	1.71304	0.5305
654306.45	4180971.91	654306.45_4180971.91	0.15278	0.13255	0.22178	3.45442	0.08945	0.20915	0.15278	7.32995	1.81805	0.54369
654326.45	4180971.91	654326.45_4180971.91	0.15149	0.13154	0.21927	3.4401	0.08892	0.20686	0.15149	6.75554	1.93343	0.55741
654346.45	4180971.91	654346.45_4180971.91	0.15023	0.13054	0.21681	3.42864	0.0884	0.20462	0.15023	6.24365	2.06078	0.5717
654366.45	4180971.91	654366.45_4180971.91	0.14898	0.12955	0.2144	3.41957	0.08789	0.20241	0.14898	5.78573	2.20218	0.58658
654386.45	4180971.91	654386.45_4180971.91	0.14776	0.12859	0.21204	3.41273	0.08738	0.20024	0.14776	5.37484	2.36006	0.60209
654406.45	4180971.91	654406.45_4180971.91	0.14654	0.12763	0.20971	3.40758	0.08688	0.19812	0.14654	5.00482	2.53786	0.61826
654426.45	4180971.91	654426.45_4180971.91	0.14535	0.12668	0.20744	3.40418	0.08638	0.19603	0.14535	4.67086	2.73935	0.63515
654446.45	4180971.91	654446.45_4180971.91	0.14416	0.12575	0.2052	3.40212	0.08589	0.19398	0.14416	4.36851	2.96993	0.65278
654466.45	4180971.91	654466.45_4180971.91	0.143	0.12482	0.203	3.40154	0.0854	0.19196	0.143	4.09422	3.2362	0.67121
654486.45	4180971.91	654486.45_4180971.91	0.14185	0.12391	0.20084	3.40269	0.08492	0.18998	0.14185	3.84482	3.54699	0.69047
654506.45	4180971.91	654506.45_4180971.91	0.14072	0.123	0.19872	3.40527	0.08444	0.18803	0.14072	3.61737	3.91546	0.71065
654526.45	4180971.91	654526.45_4180971.91	0.1396	0.12211	0.19664	3.40992	0.08396	0.18611	0.1396	3.4097	4.35795	0.73176
654546.45	4180971.91	654546.45_4180971.91	0.13849	0.12117	0.19458	3.41552	0.08348	0.18424	0.13849	3.21907	4.90027	0.75406
654566.45	4180971.91	654566.45_4180971.91	0.13739	0.12027	0.19255	3.42217	0.083	0.1824	0.13739	3.04367	5.57034	0.77763
654586.45	4180971.91	654586.45_4180971.91	0.13629	0.11927	0.19054	3.42915	0.08252	0.18057	0.13629	2.88188	6.41246	0.80245
654606.45	4180971.91	654606.45_4180971.91	0.13522	0.11838	0.18858	3.43748	0.08204	0.17876	0.13522	2.73297	7.49343	0.8284
654626.45	4180971.91	654626.45_4180971.91	0.13416	0.11749	0.18665	3.4478	0.08157	0.17697	0.13416	2.5955	8.92386	0.85561
654646.45	4180971.91	654646.45_4180971.91	0.13311	0.11664	0.18476	3.46174	0.08111	0.17521	0.13311	2.46885	10.90277	0.8842
654666.45	4180971.91	654666.45_4180971.91	0.13208	0.11581	0.18277	3.47894	0.08066	0.1735	0.13208	2.35167	13.78961	0.91436
654686.45	4180971.91	654686.45_4180971.91	0.13107	0.11487	0.18089	3.49988	0.08021	0.17181	0.13107	2.24304	18.28547	0.94622
654706.45	4180971.91	654706.45_4180971.91	0.13008	0.11407	0.1791	3.52537	0.07977	0.17016	0.13008	2.1421	25.83063	0.97996
654726.45	4180971.91	654726.45_4180971.91	0.1291	0.11328	0.17728	3.55646	0.07934	0.16853	0.1291	2.04808	39.95741	1.01572
654746.45	4180971.91	654746.45_4180971.91	0.12813	0.11249	0.17556	3.59484	0.07891	0.16693	0.12813	1.96039	75.41251	1.05374
654186.45	4180991.91	654186.45_4180991.91	0.16106	0.13903	0.23748	4.05845	0.09273	0.22317	0.16106	13.15233	1.34253	0.4764
654206.45	4180991.91	654206.45_4180991.91	0.15966	0.13794	0.23467	4.00942	0.09217	0.22062	0.15966	11.81181	1.41499	0.48736
654226.45	4180991.91	654226.45_4180991.91	0.15828	0.13686	0.23191	3.97066	0.09162	0.21811	0.15828	10.66681	1.49372	0.49874
654246.45	4180991.91	654246.45_4180991.91	0.15692	0.1358	0.22921	3.93977	0.09108	0.21566	0.15692	9.67875	1.57935	0.51056
654266.45	4180991.91	654266.45_4180991.91	0.15558	0.13474	0.22656	3.91495	0.09054	0.21325	0.15558	8.81865	1.67279	0.52284

654286.45	4180991.91	654286.45_4180991.91	0.15426	0.1337	0.22396	3.89465	0.09001	0.21089	0.15426	8.06439	1.77502	0.53564
654306.45	4180991.91	654306.45_4180991.91	0.15296	0.13268	0.22141	3.87817	0.08948	0.20857	0.15296	7.39943	1.88722	0.54895
654326.45	4180991.91	654326.45_4180991.91	0.15168	0.13167	0.21891	3.86485	0.08895	0.20629	0.15168	6.81033	2.01081	0.56283
654346.45	4180991.91	654346.45_4180991.91	0.15041	0.13068	0.21646	3.85441	0.08843	0.20406	0.15041	6.28648	2.14746	0.57726
654366.45	4180991.91	654366.45_4180991.91	0.14916	0.12969	0.21406	3.84605	0.08792	0.20186	0.14916	5.81867	2.29964	0.59232
654386.45	4180991.91	654386.45_4180991.91	0.14792	0.12871	0.21169	3.8397	0.08741	0.19971	0.14792	5.39969	2.46998	0.60804
654406.45	4180991.91	654406.45_4180991.91	0.1467	0.12775	0.20937	3.83522	0.08691	0.19759	0.1467	5.02319	2.66217	0.62443
654426.45	4180991.91	654426.45_4180991.91	0.14551	0.1268	0.2071	3.83261	0.08641	0.19551	0.14551	4.68417	2.88058	0.64154
654446.45	4180991.91	654446.45_4180991.91	0.14433	0.12586	0.20486	3.83113	0.08591	0.19346	0.14433	4.37774	3.13141	0.65946
654186.45	4181011.91	654186.45_4181011.91	0.16126	0.13918	0.23707	4.6106	0.09276	0.2225	0.16126	13.26918	1.37737	0.48073
654206.45	4181011.91	654206.45_4181011.91	0.15986	0.13808	0.23426	4.56663	0.0922	0.21996	0.15986	11.91261	1.45306	0.49176
654226.45	4181011.91	654226.45_4181011.91	0.15848	0.137	0.23151	4.53176	0.09165	0.21747	0.15848	10.751	1.53552	0.50321
654246.45	4181011.91	654246.45_4181011.91	0.15712	0.13594	0.22881	4.50379	0.09111	0.21503	0.15712	9.74647	1.62558	0.51512
654326.45	4181011.91	654326.45_4181011.91	0.15185	0.1318	0.21854	4.43408	0.08898	0.20571	0.15185	6.82866	2.0836	0.56782
654346.45	4181011.91	654346.45_4181011.91	0.15058	0.1308	0.21609	4.42394	0.08846	0.20348	0.15058	6.29721	2.22985	0.58241
654366.45	4181011.91	654366.45_4181011.91	0.14933	0.12981	0.21369	4.41593	0.08794	0.2013	0.14933	5.82354	2.39296	0.59763
654386.45	4181011.91	654386.45_4181011.91	0.14809	0.12883	0.21133	4.40982	0.08743	0.19915	0.14809	5.40005	2.57601	0.61351
654406.45	4181011.91	654406.45_4181011.91	0.14687	0.12786	0.20901	4.40551	0.08692	0.19704	0.14687	5.0203	2.78284	0.6301
654426.45	4181011.91	654426.45_4181011.91	0.14567	0.12691	0.20674	4.40265	0.08642	0.19497	0.14567	4.67864	3.01857	0.64745
654446.45	4181011.91	654446.45_4181011.91	0.14449	0.12592	0.2045	4.40042	0.08592	0.19295	0.14449	4.37016	3.28958	0.66566
653986.45	4181031.91	653986.45_4181031.91	0.17674	0.15112	0.26803	8.74427	0.09868	0.24998	0.17674	94.06586	0.89125	0.39339
654006.45	4181031.91	654006.45_4181031.91	0.17511	0.14987	0.26458	7.50744	0.09806	0.2469	0.17511	64.42511	0.92788	0.4012
654026.45	4181031.91	654026.45_4181031.91	0.1735	0.14863	0.2612	6.77487	0.09745	0.24389	0.1735	48.01228	0.96704	0.40928
654366.45	4181031.91	654366.45_4181031.91	0.1495	0.12993	0.21329	5.21931	0.08795	0.20071	0.1495	5.8006	2.48221	0.60262
654386.45	4181031.91	654386.45_4181031.91	0.14827	0.1289	0.21094	5.21271	0.08744	0.19858	0.14827	5.37608	2.67793	0.61867
654406.45	4181031.91	654406.45_4181031.91	0.14704	0.12793	0.20862	5.20648	0.08693	0.19649	0.14704	4.99565	2.89929	0.63549
654426.45	4181031.91	654426.45_4181031.91	0.14583	0.12695	0.20634	5.19929	0.08642	0.19443	0.14583	4.65331	3.15096	0.65316
654446.45	4181031.91	654446.45_4181031.91	0.14464	0.12599	0.2041	5.19331	0.08591	0.1924	0.14464	4.34472	3.43953	0.67169
653986.45	4181051.91	653986.45_4181051.91	0.17697	0.15129	0.26747	9.06105	0.0987	0.2491	0.17697	93.26396	0.90677	0.39672
654006.45	4181051.91	654006.45_4181051.91	0.17533	0.15003	0.26403	8.10288	0.09808	0.24604	0.17533	64.04814	0.94439	0.40457
654026.45	4181051.91	654026.45_4181051.91	0.17371	0.14879	0.26066	7.57068	0.09747	0.24305	0.17371	47.83422	0.98461	0.4127
654366.45	4181051.91	654366.45_4181051.91	0.14968	0.12999	0.21287	6.43964	0.08795	0.20012	0.14968	5.74959	2.56621	0.6075
654386.45	4181051.91	654386.45_4181051.91	0.14844	0.129	0.21052	6.43176	0.08744	0.19799	0.14844	5.32781	2.77342	0.62373
654406.45	4181051.91	654406.45_4181051.91	0.14721	0.12803	0.20821	6.424	0.08693	0.1959	0.14721	4.95024	3.00771	0.64071
654426.45	4181051.91	654426.45_4181051.91	0.14599	0.12705	0.20593	6.41091	0.08642	0.19385	0.14599	4.61037	3.27396	0.65861
654446.45	4181051.91	654446.45_4181051.91	0.14479	0.12597	0.20369	6.39662	0.0859	0.19183	0.14479	4.30401	3.57842	0.67734
653986.45	4181071.91	653986.45_4181071.91	0.17721	0.15146	0.26688	10.17005	0.09872	0.24817	0.17721	92.44446	0.92071	0.39976
654006.45	4181071.91	654006.45_4181071.91	0.17556	0.15019	0.26345	9.53927	0.09809	0.24513	0.17556	63.62486	0.95933	0.40768
654026.45	4181071.91	654026.45_4181071.91	0.17394	0.14895	0.26009	9.23531	0.09748	0.24216	0.17394	47.60109	1.0006	0.41584
654366.45	4181071.91	654366.45_4181071.91	0.14985	0.1301	0.21243	8.54303	0.08795	0.19949	0.14985	5.67264	2.64273	0.61225
654386.45	4181071.91	654386.45_4181071.91	0.14861	0.12911	0.21009	8.52611	0.08743	0.19737	0.14861	5.2569	2.86009	0.62869
654406.45	4181071.91	654406.45_4181071.91	0.14738	0.12813	0.20778	8.50763	0.08692	0.19529	0.14738	4.88478	3.10581	0.64587
654426.45	4181071.91	654426.45_4181071.91	0.14615	0.12707	0.2055	8.48006	0.0864	0.19325	0.14615	4.55016	3.38466	0.66392
654446.45	4181071.91	654446.45_4181071.91	0.14494	0.12604	0.20326	8.43476	0.08588	0.19121	0.14494	4.24741	3.70166	0.68291
653986.45	4181091.91	653986.45_4181091.91	0.17745	0.15163	0.26626	13.79097	0.09873	0.24719	0.17745	91.61684	0.93338	0.40251
654006.45	4181091.91	654006.45_4181091.91	0.1758	0.1503	0.26283	13.51584	0.0981	0.24418	0.1758	63.13655	0.97298	0.41051
654026.45	4181091.91	654026.45_4181091.91	0.17417	0.14905	0.25948	13.39128	0.09748	0.24124	0.17417	47.23982	1.01534	0.41877
654366.45	4181091.91	654366.45_4181091.91	0.15003	0.13022	0.21198	13.0373	0.08794	0.19883	0.15003	5.57049	2.71058	0.61697
654386.45	4181091.91	654386.45_4181091.91	0.14878	0.12922	0.20964	12.98904	0.08742	0.19673	0.14878	5.16429	2.93616	0.63357
654406.45	4181091.91	654406.45_4181091.91	0.14755	0.12823	0.20733	12.91868	0.08691	0.19466	0.14755	4.80048	3.19107	0.65097
654426.45	4181091.91	654426.45_4181091.91	0.14632	0.12713	0.20506	12.82189	0.08639	0.19262	0.14632	4.47322	3.48004	0.66923
654446.45	4181091.91	654446.45_4181091.91	0.14511	0.1261	0.20282	12.66935	0.08586	0.19058	0.14511	4.17678	3.80818	0.68838
653851.21	4180757.52	653851.21_4180757.52	0.18527	0.15748	0.29683	2.15439	0.10207	0.2826	0.18527	2.66818	0.51879	0.29437
653871.21	4180757.52	653871.21_4180757.52	0.18357	0.15613	0.2928	2.14802	0.10142	0.27884	0.18357	2.91447	0.53413	0.29958
653891.21	4180757.52	653891.21_4180757.52	0.18186	0.15481	0.28887	2.13459	0.10078	0.27517	0.18186	3.18863	0.55006	0.30492
653911.21	4180757.52	653911.21_4180757.52	0.18018	0.15351	0.28502	2.11855	0.10015	0.27158	0.18018	3.47973	0.56659	0.31041
653931.21	4180757.52	653931.21_4180757.52	0.17854	0.15222	0.28126	2.10745	0.09952	0.26806	0.17854	3.78961	0.58377	0.31604
653951.21	4180757.52	653951.21_4180757.52	0.1769	0.15095	0.27759	2.09504	0.0989	0.26463	0.1769	4.09861	0.60161	0.32184
653851.21	4180777.52	653851.21_4180777.52	0.18557	0.15765	0.29699	2.34903	0.10216	0.28213	0.18557	2.95833	0.52848	0.29818
653871.21	4180777.52	653871.21_4180777.52	0.18384	0.15631	0.29295	2.34141	0.10151	0.27838	0.18384	3.25017	0.54449	0.30351
653891.21	4180777.52	653891.21_4180777.52	0.18213	0.15499	0.28901	2.32593	0.10087	0.27472	0.18213	3.59638	0.56117	0.30898
653911.21	4180777.52	653911.21_4180777.52	0.18043	0.15367	0.28515	2.30613	0.10023	0.27113	0.18043	3.98143	0.57856	0.31462
653931.21	4180777.52	653931.21_4180777.52	0.17876	0.15238	0.28138	2.29154	0.0996	0.26762	0.17876	4.40032	0.59665	0.3204
653951.21	4180777.52	653951.21_4180777.52	0.17712	0.15111	0.27769	2.27496	0.09898	0.26419	0.17712	4.83938	0.61551	0.32636
653851.21	4180797.52	653851.21_4180797.52	0.18586	0.15784	0.29709	2.5822	0.10225	0.28162	0.18586	3.32352	0.53853	0.30202
653871.21	4180797.52	653871.21_4180797.52	0.1841	0.15649	0.29304	2.5723	0.1016	0.27788	0.1841	3.66582	0.55519	0.30748
653891.21	4180797.52	653891.21_4180797.52	0.18238	0.15516	0.28908	2.55426	0.10096	0.27422	0.18238	4.09556	0.57258	0.31309
653911.21	4180797.52	653911.21_4180797.52	0.18067	0.15384	0.28522	2.52978	0.10032	0.27064	0.18067	4.61432	0.59078	0.31886
653931.21	4180797.52	653931.21_4180797.52	0.17898	0.15254	0.28143	2.51031	0.09969	0.26714	0.17898	5.20352	0.60979	0.3248
653951.21	4180797.52	653951.21_4180797.52	0.17732	0.15127	0.27774	2.48822	0.09906	0.26372	0.17732	5.85925	0.62961	0.3309
653851.21	4180817.52	653851.21_4180817.52	0.18611	0.15802	0.29711	2.86663	0.10234	0.28107	0.18611	3.79174	0.54914	0.30592
653871.21	4180817.52	653871.21_4180817.52	0.18434	0.15666	0.29305	2.85305	0.10169	0.27734	0.18434	4.20797	0.56642	0.31149
653891.21	4180817.52	653891.21_4180817.52	0.1826	0.15533	0.28909	2.83151	0.10104	0.27369	0.1826	4.73569	0.58454	0.31722
653911.21	4180817.52	653911.21_4180817.52	0.18088	0.15401	0.28522	2.80086	0.1004	0.27012	0.18088	5.42883	0.60352	0.32313
653931.21	4180817.52	653931.21_4180817.52	0.17918	0.15272	0.28143	2.77465	0.09977	0.26663	0.17918	6.29878	0.62341	0.3292
653951.21	4180817.52	653951.21_4180817.52	0.1775	0.15143	0.27773	2.74472	0.09914	0.26321	0.1775	7.34297	0.64422	0.33546
653851.21	4180837.52	653851.21_4180837.52	0.18634	0.1582	0.29706	3.22186	0.10243	0.28047	0.18634	4.37616	0.56051	0.30984
653871.21	4180837.52	653871.21_4180837.52	0.18456	0.15684	0.293	3.20227	0.10177	0.27675	0.18456	4.92683	0.5784	0.31553
653891.21	4180837.52	653891.21_4180837.52	0.1828	0.1555	0.28903	3.17589	0.10113	0.27311	0.1828	5.61645	0.59721	0.32138
653911.21	4180837.52	653911.21_4180837.52	0.18107	0.15419	0.28516	3.13684	0.10048	0.26955	0.18107	6.53641	0.61697	0.3274
653931.21	4180837.52	653931.21_4180837.52	0.17937	0.15289	0.28136	3.1006	0.09985	0.26607	0.17937	7.85253	0.63774	0.33362
653951.21	4180837.52	653951.21_4180837.52	0.17769	0.15161	0.27766	3.05982	0.09922	0.26266	0.17769	9.68265	0.65951	0.34
653851.21	4180857.52	653851.21_4180857.52	0.18656	0.15838	0.29695	3.67911	0.10251	0.27984	0.18656	5.08157	0.57274	0.3138
653871.21	4180857.52	653871.21_4180857.52	0.18477	0.15703	0.29289	3.65042	0.10185	0.27613	0.18477	5.84295	0.59126	0.31958
653891.21	4180857.52	653891.21_4180857.52	0.18301	0.15569	0.28891	3.61643	0.10121	0.2725	0.18301	6.83803	0.61074	0.32554
653911.21	4180857.52	653911.21_4180857.52	0.18127	0.15437	0.28503	3.56543	0.10056	0.26895	0.18127	8.19406	0.63127	0.33167
653931.21	4180857.52	653931.21_4180857.52	0.17956	0.15307	0.28124	3.51431	0.09993	0.26548	0.17956	10.22106	0.65288	0.338
653951.21	4180857.52	653951.21_4180857.52	0.17787	0.15179	0.27753	3.45635	0.0993	0.26208	0.17787	13.79909	0.67568	0.34453
650568.61	4181583.03	650568.61_4181583.03	1.49686	2.27325	1.37154	0.13047	0.67423	1.79066	1.49686	0.09381	0.06913	0.06916
650588.61	4181583.03	650588.61_4181583.03	1.5667	2.33956	1.45282	0.13212	0.66421	1.91778	1.5667	0.09458	0.06959	0.06954
650608.61	4181583.03	650608.61_4181583.03	1.64585	2.39893	1.54204	0.13383	0.65029	2.08401	1.64585	0.09541	0.07009	0.06996
650628.61	4181583.03	650628.61_4181583.03	1.72345	2.44968	1.63943	0.13555	0.63268	2.30023	1.72345	0.09628	0.07062	0.07041
650648.61	4181583.03	650648.61_4181583.03	1.78551	2.49815	1.74759	0.13732	0.61949	2.54706	1.78551	0.09713	0.07114	0.07085
650668.61	4181583.03	650668.61_4181583.03	1.83636	2.54124	1.86758	0.13912	0.60679	2.8484	1.83636	0.098	0.07166	0.07128
650548.61	4181603.03	650548.61_4181603.03	1.53301	2.39683	1.34066	0.12854	0.69027	1.65782	1.53301	0.09248	0.06839	0.06858
650568.61	4181603.03	650568.61_4181603.03	1.60132	2.47104	1.41978	0.13015	0.67602	1.7729	1.60132	0.09325	0.06885	0.06897
650588.61	4181603.03	650588.61_4181603.03	1.65482	2.55694	1.49095	0.13164	0.66707	1.847	1.65482	0.09384	0.06918	0.06923
650608.61	4181603.03	650608.61_4181603.03	1.74597	2.62514	1.5904	0.13334	0.65289	2.00885	1.74597	0.09468	0.06969	0.06966
650628.61	4181603.03	650628.61_4181603.03	1.85007	2.68003	1.70932	0.13516	0.63845	2.24135	1.85007	0.09562	0.07028	0.07016
650648.61	4181603.03	650648.61_4181603.03	1.92779	2.73175	1.82742	0.13691	0.62163	2.49123	1.92779	0.09649	0.0708	0.07061

650668.61	4181603.03	650668.61_4181603.03	1.99043	2.77733	1.95785	0.13868	0.60841	2.79874	1.99043	0.09737	0.07133	0.07105
650528.61	4181623.03	650528.61_4181623.03	1.56404	2.53773	1.30983	0.12662	0.7122	1.51949	1.56404	0.09109	0.06758	0.06793
650548.61	4181623.03	650548.61_4181623.03	1.61704	2.62955	1.37442	0.12805	0.69788	1.58837	1.61704	0.09171	0.06794	0.06822
650568.61	4181623.03	650568.61_4181623.03	1.71209	2.70513	1.46988	0.12975	0.68186	1.73489	1.71209	0.09261	0.0685	0.06871
650588.61	4181623.03	650588.61_4181623.03	1.78557	2.79571	1.55413	0.13128	0.66807	1.83921	1.78557	0.09331	0.06891	0.06904
650608.61	4181623.03	650608.61_4181623.03	1.87378	2.87549	1.64769	0.13287	0.65433	1.97469	1.87378	0.09405	0.06935	0.06941
650628.61	4181623.03	650628.61_4181623.03	1.99257	2.94252	1.78003	0.13467	0.63994	2.19278	1.99257	0.09498	0.06991	0.06989
650648.61	4181623.03	650648.61_4181623.03	2.08929	2.99971	1.91142	0.13642	0.62629	2.44378	2.08929	0.09586	0.07045	0.07035
650668.61	4181623.03	650668.61_4181623.03	2.16261	3.05518	2.05632	0.13816	0.61029	2.72701	2.16261	0.09671	0.07095	0.07077
650508.61	4181643.03	650508.61_4181643.03	1.58514	2.67414	1.27799	0.12473	0.72531	1.41812	1.58514	0.0898	0.06683	0.06734
650528.61	4181643.03	650528.61_4181643.03	1.63812	2.78182	1.33031	0.12601	0.71534	1.45716	1.63812	0.0903	0.06711	0.06755
650548.61	4181643.03	650548.61_4181643.03	1.72868	2.87902	1.41468	0.12758	0.69941	1.56087	1.72868	0.0911	0.06759	0.06797
650568.61	4181643.03	650568.61_4181643.03	1.82542	2.97728	1.51168	0.1292	0.68387	1.68398	1.82542	0.09192	0.06809	0.0684
650588.61	4181643.03	650588.61_4181643.03	1.92239	3.07443	1.61065	0.13079	0.66922	1.8109	1.92239	0.0927	0.06856	0.06879
650608.61	4181643.03	650608.61_4181643.03	2.01862	3.16571	1.70858	0.13234	0.65545	1.93973	2.01862	0.09343	0.06898	0.06915
650628.61	4181643.03	650628.61_4181643.03	2.15831	3.24531	1.85596	0.13412	0.64095	2.15394	2.15831	0.09435	0.06955	0.06963
650648.61	4181643.03	650648.61_4181643.03	2.27804	3.30883	2.00113	0.13586	0.62395	2.40875	2.27804	0.09525	0.07009	0.0701
650668.61	4181643.03	650668.61_4181643.03	2.36683	3.37297	2.16061	0.13759	0.611	2.68767	2.36683	0.09609	0.07059	0.07052
650488.61	4181663.03	650488.61_4181663.03	1.58029	2.82369	1.24632	0.12284	0.74309	1.32051	1.58029	0.0885	0.06606	0.06672
650508.61	4181663.03	650508.61_4181663.03	1.6537	2.94364	1.30076	0.12412	0.73246	1.36036	1.6537	0.08903	0.06635	0.06695
650528.61	4181663.03	650528.61_4181663.03	1.75412	3.05249	1.37462	0.12558	0.71626	1.44164	1.75412	0.08975	0.06678	0.06732
650548.61	4181663.03	650548.61_4181663.03	1.86204	3.16881	1.46442	0.12713	0.70024	1.54297	1.86204	0.09054	0.06726	0.06773
650568.61	4181663.03	650568.61_4181663.03	1.96467	3.28698	1.56049	0.12867	0.68494	1.6521	1.96467	0.09131	0.06772	0.06812
650588.61	4181663.03	650588.61_4181663.03	2.08146	3.4008	1.67292	0.13027	0.66997	1.78436	2.08146	0.09212	0.0682	0.06854
650608.61	4181663.03	650608.61_4181663.03	2.18838	3.50754	1.77743	0.13179	0.65617	1.90818	2.18838	0.09283	0.06862	0.06888
650628.61	4181663.03	650628.61_4181663.03	2.3524	3.60009	1.93892	0.13356	0.64155	2.12008	2.3524	0.09376	0.06918	0.06937
650648.61	4181663.03	650648.61_4181663.03	2.49833	3.67167	2.09758	0.13527	0.6242	2.37802	2.49833	0.09466	0.06973	0.06984
650668.61	4181663.03	650668.61_4181663.03	2.60513	3.74832	2.27426	0.13698	0.61134	2.64839	2.60513	0.09549	0.07022	0.07025
650448.61	4181683.03	650448.61_4181683.03	1.47599	2.88472	1.1531	0.1196	0.77911	1.16875	1.47599	0.08652	0.06486	0.06574
650468.61	4181683.03	650468.61_4181683.03	1.57159	2.98003	1.21415	0.12098	0.76049	1.23657	1.57159	0.08725	0.0653	0.06612
650488.61	4181683.03	650488.61_4181683.03	1.654	3.11536	1.27318	0.12228	0.7498	1.27561	1.654	0.08779	0.06559	0.06636
650508.61	4181683.03	650508.61_4181683.03	1.76108	3.23704	1.34077	0.12367	0.73319	1.34268	1.76108	0.08847	0.066	0.0667
650528.61	4181683.03	650528.61_4181683.03	1.87858	3.36867	1.41941	0.12511	0.7169	1.42215	1.87858	0.08919	0.06643	0.06706
650548.61	4181683.03	650548.61_4181683.03	1.99905	3.50938	1.50897	0.12659	0.70106	1.51332	1.99905	0.08993	0.06687	0.06744
650568.61	4181683.03	650568.61_4181683.03	2.12102	3.65247	1.6114	0.12811	0.68569	1.61884	2.12102	0.0907	0.06733	0.06783
650588.61	4181683.03	650588.61_4181683.03	2.24977	3.78981	1.72784	0.12967	0.67079	1.74117	2.24977	0.09149	0.06779	0.06823
650608.61	4181683.03	650608.61_4181683.03	2.39874	3.91578	1.86373	0.13129	0.65627	1.88878	2.39874	0.0923	0.06827	0.06864
650628.61	4181683.03	650628.61_4181683.03	2.57639	4.0245	2.02814	0.13298	0.64188	2.08251	2.57639	0.09317	0.0688	0.06909
650648.61	4181683.03	650648.61_4181683.03	2.74926	4.11243	2.2032	0.13468	0.62468	2.32808	2.74926	0.09406	0.06933	0.06955
650668.61	4181683.03	650668.61_4181683.03	2.88122	4.20255	2.40025	0.13637	0.61174	2.59252	2.88122	0.09489	0.06981	0.06995
650428.61	4181703.03	650428.61_4181703.03	1.46885	3.07681	1.11329	0.1177	0.80547	1.07294	1.46885	0.08512	0.06395	0.06498
650448.61	4181703.03	650448.61_4181703.03	1.57412	3.16102	1.18172	0.11916	0.77968	1.15272	1.57412	0.08598	0.0645	0.06547
650468.61	4181703.03	650468.61_4181703.03	1.65516	3.3008	1.24304	0.12046	0.76757	1.19642	1.65516	0.08657	0.06484	0.06575
650488.61	4181703.03	650488.61_4181703.03	1.75756	3.43503	1.30727	0.12179	0.75046	1.25389	1.75756	0.08722	0.06522	0.06608
650508.61	4181703.03	650508.61_4181703.03	1.8785	3.58153	1.38087	0.12317	0.73363	1.32149	1.8785	0.08792	0.06563	0.06643
650528.61	4181703.03	650528.61_4181703.03	2.00814	3.74255	1.46121	0.12458	0.71741	1.39517	2.00814	0.08861	0.06604	0.06678
650548.61	4181703.03	650548.61_4181703.03	2.14113	3.91332	1.54964	0.126	0.70174	1.47643	2.14113	0.08932	0.06645	0.06712
650568.61	4181703.03	650568.61_4181703.03	2.27649	4.08417	1.65054	0.12747	0.68651	1.57025	2.27649	0.09005	0.06687	0.06748
650588.61	4181703.03	650588.61_4181703.03	2.40722	4.24213	1.7593	0.12895	0.67188	1.674	2.40722	0.09076	0.06728	0.06783
650608.61	4181703.03	650608.61_4181703.03	2.57518	4.39754	1.90211	0.13055	0.65732	1.81207	2.57518	0.09157	0.06776	0.06824
650628.61	4181703.03	650628.61_4181703.03	2.82404	4.54619	2.1185	0.13238	0.64221	2.02734	2.82404	0.09257	0.06836	0.06877
650648.61	4181703.03	650648.61_4181703.03	3.02964	4.65997	2.31809	0.13408	0.62832	2.25318	3.02964	0.09344	0.06888	0.06921
650668.61	4181703.03	650668.61_4181703.03	3.2061	4.75635	2.54022	0.1358	0.61197	2.52872	3.2061	0.0943	0.06938	0.06964
650408.61	4181723.03	650408.61_4181723.03	1.53916	3.23568	1.08859	0.11609	0.81867	1.02664	1.53916	0.08407	0.0633	0.06448
650428.61	4181723.03	650428.61_4181723.03	1.55849	3.38288	1.12522	0.11713	0.80689	1.04381	1.55849	0.08447	0.0635	0.06463
650448.61	4181723.03	650448.61_4181723.03	1.65755	3.51534	1.19787	0.11856	0.78695	1.10781	1.65755	0.08526	0.06399	0.06505
650468.61	4181723.03	650468.61_4181723.03	1.76256	3.65402	1.26955	0.11995	0.76828	1.16985	1.76256	0.08599	0.06443	0.06544
650488.61	4181723.03	650488.61_4181723.03	1.88013	3.81126	1.3436	0.12131	0.7506	1.23267	1.88013	0.08669	0.06484	0.06579
650508.61	4181723.03	650508.61_4181723.03	2.00337	3.99192	1.41691	0.12265	0.73397	1.29297	2.00337	0.08735	0.06522	0.06612
650528.61	4181723.03	650528.61_4181723.03	2.12564	4.1822	1.4875	0.12395	0.71817	1.35114	2.12564	0.08796	0.06557	0.0664
650548.61	4181723.03	650548.61_4181723.03	2.27405	4.38587	1.57664	0.12534	0.70245	1.42678	2.27405	0.08865	0.06596	0.06674
650568.61	4181723.03	650568.61_4181723.03	2.44467	4.59966	1.68849	0.12684	0.68697	1.52137	2.44467	0.08941	0.0664	0.06712
650588.61	4181723.03	650588.61_4181723.03	2.61221	4.79654	1.8112	0.12834	0.6721	1.62658	2.61221	0.09016	0.06683	0.06748
650608.61	4181723.03	650608.61_4181723.03	2.81269	4.99206	1.96834	0.12997	0.65744	1.76121	2.81269	0.09098	0.06731	0.06789
650628.61	4181723.03	650628.61_4181723.03	3.08524	5.18697	2.19004	0.13175	0.64265	1.95077	3.08524	0.09193	0.06788	0.06839
650648.61	4181723.03	650648.61_4181723.03	3.29507	5.33093	2.3857	0.13337	0.62929	2.13273	3.29507	0.09271	0.06832	0.06876
650668.61	4181723.03	650668.61_4181723.03	3.58764	5.44423	2.69664	0.13525	0.61498	2.45029	3.58764	0.09373	0.06893	0.06929
650368.61	4181743.03	650368.61_4181743.03	1.55148	3.30174	1.00077	0.11315	0.85972	0.92409	1.55148	0.08224	0.06214	0.06351
650388.61	4181743.03	650388.61_4181743.03	1.61337	3.41391	1.05178	0.11438	0.83679	0.97096	1.61337	0.08294	0.06257	0.06389
650408.61	4181743.03	650408.61_4181743.03	1.67402	3.55915	1.10858	0.11566	0.81796	1.01258	1.67402	0.08358	0.06294	0.06421
650428.61	4181743.03	650428.61_4181743.03	1.71571	3.73898	1.16143	0.11683	0.80567	1.0408	1.71571	0.08409	0.06322	0.06443
650448.61	4181743.03	650448.61_4181743.03	1.75519	3.8875	1.20455	0.11793	0.78813	1.07015	1.75519	0.08458	0.06349	0.06465
650468.61	4181743.03	650468.61_4181743.03	1.8851	4.06996	1.29193	0.11941	0.7687	1.13983	1.8851	0.08541	0.06399	0.06509
650488.61	4181743.03	650488.61_4181743.03	1.99015	4.2601	1.36051	0.1207	0.75141	1.19123	1.99015	0.08605	0.06436	0.06541
650508.61	4181743.03	650508.61_4181743.03	2.14504	4.48875	1.45198	0.12213	0.73398	1.26193	2.14504	0.0868	0.0648	0.06579
650528.61	4181743.03	650528.61_4181743.03	2.33362	4.74713	1.55987	0.12363	0.71694	1.34562	2.33362	0.08759	0.06527	0.0662
650548.61	4181743.03	650548.61_4181743.03	2.52485	5.02184	1.66899	0.12508	0.70097	1.4278	2.52485	0.08833	0.0657	0.06657
650568.61	4181743.03	650568.61_4181743.03	2.73401	5.29504	1.79377	0.12658	0.68552	1.52088	2.73401	0.08909	0.06613	0.06693
650588.61	4181743.03	650588.61_4181743.03	2.94825	5.55108	1.9342	0.12809	0.67067	1.62484	2.94825	0.08984	0.06656	0.0673
650608.61	4181743.03	650608.61_4181743.03	3.14954	5.77408	2.08106	0.12959	0.65658	1.73526	3.14954	0.09056	0.06696	0.06763
650628.61	4181743.03	650628.61_4181743.03	3.27936	5.88809	2.18303	0.13087	0.6437	1.83285	3.27936	0.09108	0.06722	0.06784
650648.61	4181743.03	650648.61_4181743.03	3.60798	6.11942	2.44801	0.13269	0.62959	2.03637	3.60798	0.09203	0.06777	0.06832
650668.61	4181743.03	650668.61_4181743.03	4.03013	6.30999	2.86186	0.1347	0.61492	2.35364	4.03013	0.09316	0.06845	0.06892
650348.61	4181763.03	650348.61_4181763.03	1.61613	3.49112	0.96558	0.11155	0.87999	0.87448	1.61613	0.08113	0.0614	0.06291
650368.61	4181763.03	650368.61_4181763.03	1.67397	3.64931	1.01462	0.11275	0.86551	0.90528	1.67397	0.0817	0.06173	0.06319
650388.61	4181763.03	650388.61_4181763.03	1.73004	3.81235	1.06464	0.11392	0.84514	0.93841	1.73004	0.08229	0.06207	0.06348
650408.61	4181763.03	650408.61_4181763.03	1.81069	3.96604	1.12562	0.11521	0.82406	0.98497	1.81069	0.083	0.06249	0.06385
650428.61	4181763.03	650428.61_4181763.03	1.88603	4.14608	1.18868	0.11647	0.80451	1.02882	1.88603	0.08365	0.06288	0.06418
650448.61	4181763.03	650448.61_4181763.03	1.90916	4.33562	1.22752	0.11749	0.78767	1.04935	1.90916	0.08408	0.06309	0.06434
650468.61	4181763.03	650468.61_4181763.03	2.00798	4.54582	1.29974	0.11881	0.76923	1.09972	2.00798	0.08477	0.06349	0.06468
650488.61	4181763.03	650488.61_4181763.03	2.20108	4.80955	1.4169	0.12042	0.74968	1.18567	2.20108	0.0857	0.06406	0.0652
650508.61	4181763.03	650508.61_4181763.03	2.36664	5.09827	1.51572	0.12184	0.73228	1.2545	2.36664	0.08645	0.0645	0.06558
650528.61	4181763.03	650528.61_4181763.03	2.54478	5.44	1.6164	0.12323	0.71597	1.32139	2.54478	0.08715	0.0649	0.06591
650548.61	4181763.03	650548.61_4181763.03	2.75328	5.79978	1.73005	0.12467	0.70016	1.39669	2.75328	0.08787	0.0653	0.06626
650568.61	4181763.03	650568.61_4181763.03	2.99229	6.15165	1.86103	0.12615	0.68483	1.48279	2.99229	0.08861	0.06572	0.06661
650588.61	4181763.03	650588.61_4181763.03	3.2681	6.47976	2.02166	0.12769	0.66979	1.58779	3.2681	0.08939	0.06616	0.06699
650608.61	4181763.03	650608.61_4181763.03	3.45469	6.72271	2.14117	0.12904	0.65636	1.66827	3.45469	0.08998	0.06647	0.06724
650648.61	4181763.03	650648.61_4181763.03	4.04215	7.14111	2.5635	0.13218	0.62907	1.9649	4.04215	0.09151	0.06731	0.06795
650668.61	4181763.03	650668.61_4181763.03	4.57734	7.39357	3.0404	0.1342	0.61446	2.2625	4.57734	0.09266	0.06798	0.06855
650308.61	4181783.03	650308.61_4181783.03	1.58989	3.56936	0.88824	0.10884	0.92614	0.7934	1.58989	0.07939	0.06026	0.06194

650328.61	4181783.03	650328.61_4181783.03	1.66007	3.71609	0.93091	0.11	0.90338	0.82347	1.66007	0.07999	0.06062	0.06225
650348.61	4181783.03	650348.61_4181783.03	1.72357	3.88589	0.97533	0.11113	0.88744	0.85083	1.72357	0.08055	0.06094	0.06253
650368.61	4181783.03	650368.61_4181783.03	1.78533	4.05979	1.01978	0.11226	0.86629	0.87946	1.78533	0.08112	0.06126	0.0628
650388.61	4181783.03	650388.61_4181783.03	1.84386	4.23713	1.06546	0.11338	0.84584	0.90868	1.84386	0.08168	0.06158	0.06307
650408.61	4181783.03	650408.61_4181783.03	1.9433	4.43255	1.13049	0.11469	0.82465	0.95358	1.9433	0.08241	0.06201	0.06345
650428.61	4181783.03	650428.61_4181783.03	2.07394	4.62459	1.21027	0.1161	0.80319	1.01201	2.07394	0.08322	0.06251	0.06389
650448.61	4181783.03	650448.61_4181783.03	2.09331	4.87326	1.25015	0.1171	0.7867	1.02856	2.09331	0.08363	0.0627	0.06404
650468.61	4181783.03	650468.61_4181783.03	2.25799	5.16894	1.35209	0.11861	0.76698	1.09605	2.25799	0.08449	0.06322	0.0645
650488.61	4181783.03	650488.61_4181783.03	2.43416	5.47271	1.45824	0.12008	0.74809	1.16712	2.43416	0.08531	0.06371	0.06493
650508.61	4181783.03	650508.61_4181783.03	2.60752	5.86228	1.56217	0.12149	0.73084	1.23129	2.60752	0.08605	0.06413	0.06529
650528.61	4181783.03	650528.61_4181783.03	2.81296	6.31526	1.6778	0.12291	0.7143	1.30059	2.81296	0.08678	0.06454	0.06565
650548.61	4181783.03	650548.61_4181783.03	3.04669	6.80576	1.80481	0.12435	0.69858	1.37264	3.04669	0.0875	0.06494	0.06599
650568.61	4181783.03	650568.61_4181783.03	3.30922	7.28457	1.94212	0.1258	0.68354	1.44876	3.30922	0.08821	0.06533	0.06631
650588.61	4181783.03	650588.61_4181783.03	3.62268	7.71019	2.1063	0.1273	0.66879	1.54094	3.62268	0.08896	0.06574	0.06666
650608.61	4181783.03	650608.61_4181783.03	3.94741	8.07148	2.28861	0.1288	0.65468	1.64213	3.94741	0.08969	0.06614	0.06699
650648.61	4181783.03	650648.61_4181783.03	4.59056	8.47112	2.70568	0.13173	0.62816	1.89396	4.59056	0.09107	0.06686	0.06759
650668.61	4181783.03	650668.61_4181783.03	5.29229	8.78604	3.26483	0.13376	0.61348	2.17979	5.29229	0.09224	0.06755	0.0682
650288.61	4181803.03	650288.61_4181803.03	1.61511	3.78107	0.85621	0.10738	0.94876	0.7528	1.61511	0.07834	0.05953	0.06133
650308.61	4181803.03	650308.61_4181803.03	1.68201	3.96392	0.89485	0.10847	0.93297	0.77475	1.68201	0.07886	0.05982	0.06158
650328.61	4181803.03	650328.61_4181803.03	1.75057	4.14184	0.9337	0.10955	0.91009	0.79936	1.75057	0.07942	0.06014	0.06185
650348.61	4181803.03	650348.61_4181803.03	1.82396	4.32287	0.97607	0.11066	0.88768	0.82656	1.82396	0.08	0.06047	0.06213
650368.61	4181803.03	650368.61_4181803.03	1.92676	4.51208	1.03106	0.11191	0.86489	0.86373	1.92676	0.08069	0.06088	0.06249
650388.61	4181803.03	650388.61_4181803.03	2.00077	4.72506	1.07884	0.11303	0.84439	0.89227	2.00077	0.08126	0.0612	0.06276
650408.61	4181803.03	650408.61_4181803.03	2.13191	4.95931	1.15026	0.11438	0.82279	0.93899	2.13191	0.08203	0.06166	0.06317
650428.61	4181803.03	650428.61_4181803.03	2.25771	5.22104	1.22384	0.1157	0.80249	0.98471	2.25771	0.08275	0.06208	0.06354
650448.61	4181803.03	650448.61_4181803.03	2.3552	5.54506	1.29102	0.11693	0.78414	1.02147	2.3552	0.08337	0.06242	0.06383
650468.61	4181803.03	650468.61_4181803.03	2.47342	5.91253	1.3691	0.11821	0.76606	1.06455	2.47342	0.08402	0.06279	0.06414
650488.61	4181803.03	650488.61_4181803.03	2.70188	6.32476	1.49143	0.11975	0.74653	1.14042	2.70188	0.08492	0.06332	0.06462
650508.61	4181803.03	650508.61_4181803.03	2.8879	6.8834	1.60153	0.12114	0.72948	1.19877	2.8879	0.08564	0.06373	0.06497
650528.61	4181803.03	650528.61_4181803.03	3.11519	7.51924	1.72785	0.12257	0.71289	1.2651	3.11519	0.08638	0.06414	0.06532
650548.61	4181803.03	650548.61_4181803.03	3.37945	8.19003	1.86879	0.12402	0.69708	1.33532	3.37945	0.08712	0.06455	0.06567
650568.61	4181803.03	650568.61_4181803.03	3.68186	8.83966	2.02396	0.12547	0.68202	1.40865	3.68186	0.08784	0.06494	0.066
650588.61	4181803.03	650588.61_4181803.03	4.03696	9.39671	2.196	0.12693	0.66748	1.49029	4.03696	0.08857	0.06533	0.06632
650608.61	4181803.03	650608.61_4181803.03	4.46696	9.84965	2.40933	0.12845	0.65322	1.59073	4.46696	0.08933	0.06574	0.06667
650648.61	4181803.03	650648.61_4181803.03	5.31642	10.26364	2.89146	0.13137	0.62678	1.82585	5.31642	0.09073	0.06646	0.06726
650668.61	4181803.03	650668.61_4181803.03	6.211	10.62292	3.52865	0.13333	0.61222	2.08894	6.211	0.09187	0.06713	0.06785
650068.61	4181823.03	650068.61_4181823.03	0.99541	2.58914	0.56597	0.09583	1.29898	0.52149	0.99541	0.07169	0.05541	0.0577
650088.61	4181823.03	650088.61_4181823.03	1.04024	2.72283	0.58509	0.09677	1.27219	0.53587	1.04024	0.07221	0.05572	0.05798
650108.61	4181823.03	650108.61_4181823.03	1.08932	2.85432	0.60538	0.09774	1.22146	0.55182	1.08932	0.07274	0.05605	0.05827
650128.61	4181823.03	650128.61_4181823.03	1.13962	2.99728	0.62673	0.0987	1.19705	0.5671	1.13962	0.07325	0.05636	0.05854
650148.61	4181823.03	650148.61_4181823.03	1.19922	3.11639	0.6497	0.0997	1.14769	0.58746	1.19922	0.07387	0.05674	0.05889
650248.61	4181823.03	650248.61_4181823.03	1.54084	3.84945	0.79025	0.10489	0.99837	0.69037	1.54084	0.07672	0.05845	0.0604
650268.61	4181823.03	650268.61_4181823.03	1.61617	4.03021	0.82458	0.10596	0.98109	0.71108	1.61617	0.07726	0.05876	0.06067
650288.61	4181823.03	650288.61_4181823.03	1.69253	4.21442	0.85981	0.10701	0.95631	0.73303	1.69253	0.07781	0.05907	0.06094
650308.61	4181823.03	650308.61_4181823.03	1.77251	4.4034	0.89696	0.10808	0.93219	0.75657	1.77251	0.07838	0.05939	0.06122
650328.61	4181823.03	650328.61_4181823.03	1.85701	4.60033	0.93739	0.10918	0.90879	0.78188	1.85701	0.07896	0.05973	0.0615
650348.61	4181823.03	650348.61_4181823.03	1.95145	4.81042	0.98301	0.11033	0.88595	0.81027	1.95145	0.07958	0.06008	0.06181
650368.61	4181823.03	650368.61_4181823.03	2.07969	5.03537	1.04176	0.11161	0.86285	0.84807	2.07969	0.08031	0.06051	0.06219
650388.61	4181823.03	650388.61_4181823.03	2.18365	5.29868	1.09548	0.11278	0.84196	0.87894	2.18365	0.08093	0.06086	0.06249
650408.61	4181823.03	650408.61_4181823.03	2.3213	5.5888	1.16321	0.11407	0.82096	0.91889	2.3213	0.08164	0.06127	0.06285
650428.61	4181823.03	650428.61_4181823.03	2.49249	5.89836	1.24386	0.11544	0.79996	0.96819	2.49249	0.08242	0.06173	0.06326
650448.61	4181823.03	650448.61_4181823.03	2.65108	6.29654	1.32551	0.11676	0.7807	1.01325	2.65108	0.08313	0.06214	0.06361
650468.61	4181823.03	650468.61_4181823.03	2.68928	6.82571	1.37388	0.1178	0.76506	1.02703	2.68928	0.08354	0.06231	0.06374
650488.61	4181823.03	650488.61_4181823.03	2.98561	7.48819	1.51409	0.11941	0.74533	1.10298	2.98561	0.0845	0.06289	0.06425
650508.61	4181823.03	650508.61_4181823.03	3.1966	8.32644	1.62875	0.12079	0.72835	1.156	3.1966	0.08522	0.06328	0.06459
650528.61	4181823.03	650528.61_4181823.03	3.45951	9.2739	1.7656	0.12222	0.7117	1.21832	3.45951	0.08598	0.0637	0.06495
650548.61	4181823.03	650548.61_4181823.03	3.76508	10.22601	1.92157	0.12367	0.69572	1.28601	3.76508	0.08674	0.06412	0.06531
650568.61	4181823.03	650568.61_4181823.03	4.11365	11.08964	2.09406	0.12512	0.68052	1.35685	4.11365	0.08748	0.06452	0.06565
650588.61	4181823.03	650588.61_4181823.03	4.53744	11.78507	2.29077	0.12659	0.66586	1.4359	4.53744	0.08823	0.06492	0.06598
650608.61	4181823.03	650608.61_4181823.03	4.94559	12.16682	2.46528	0.12795	0.65235	1.50505	4.94559	0.08887	0.06524	0.06624
650648.61	4181823.03	650648.61_4181823.03	6.2561	12.70724	3.10896	0.13102	0.62508	1.75197	6.2561	0.09046	0.06608	0.06694
650668.61	4181823.03	650668.61_4181823.03	7.43022	13.13464	3.84703	0.1329	0.61067	1.98935	7.43022	0.09157	0.06672	0.0675
650028.61	4181843.03	650028.61_4181843.03	0.93766	2.56143	0.53311	0.09379	1.37728	0.48881	0.93766	0.07029	0.05445	0.05687
650048.61	4181843.03	650048.61_4181843.03	0.97398	2.72233	0.54949	0.09464	1.35275	0.49893	0.97398	0.07071	0.05469	0.05708
650068.61	4181843.03	650068.61_4181843.03	1.01723	2.86889	0.56738	0.09556	1.31023	0.51238	1.01723	0.07121	0.055	0.05735
650088.61	4181843.03	650088.61_4181843.03	1.06683	3.011	0.58731	0.09654	1.2685	0.52801	1.06683	0.07177	0.05535	0.05766
650108.61	4181843.03	650108.61_4181843.03	1.11818	3.16018	0.60776	0.0975	1.2298	0.54343	1.11818	0.0723	0.05567	0.05796
650128.61	4181843.03	650128.61_4181843.03	1.16555	3.32743	0.62704	0.09838	1.19542	0.55618	1.16555	0.07277	0.05594	0.05818
650148.61	4181843.03	650148.61_4181843.03	1.22559	3.48056	0.65043	0.09938	1.16002	0.57346	1.22559	0.07333	0.05628	0.05849
650168.61	4181843.03	650168.61_4181843.03	1.30222	3.59706	0.67747	0.10047	1.11131	0.5978	1.30222	0.07403	0.05672	0.0589
650188.61	4181843.03	650188.61_4181843.03	1.37201	3.7503	0.70366	0.10148	1.07944	0.61727	1.37201	0.0746	0.05707	0.05921
650228.61	4181843.03	650228.61_4181843.03	1.52361	4.09741	0.76216	0.10356	1.03231	0.65575	1.52361	0.07571	0.05771	0.05977
650248.61	4181843.03	650248.61_4181843.03	1.60262	4.28786	0.79362	0.10458	1.00563	0.67498	1.60262	0.07625	0.05802	0.06004
650268.61	4181843.03	650268.61_4181843.03	1.6897	4.47665	0.82762	0.10564	0.97927	0.69676	1.6897	0.07683	0.05835	0.06032
650288.61	4181843.03	650288.61_4181843.03	1.78301	4.67484	0.8642	0.10672	0.95382	0.71996	1.78301	0.07743	0.05869	0.06062
650308.61	4181843.03	650308.61_4181843.03	1.88228	4.88716	0.90377	0.10782	0.92932	0.74443	1.88228	0.07803	0.05904	0.06092
650328.61	4181843.03	650328.61_4181843.03	1.97541	5.12252	0.94308	0.1089	0.90634	0.76709	1.97541	0.07859	0.05935	0.06119
650348.61	4181843.03	650348.61_4181843.03	2.08653	5.37325	0.98955	0.11005	0.88354	0.79432	2.08653	0.07922	0.0597	0.0615
650368.61	4181843.03	650368.61_4181843.03	2.21572	5.65402	1.04348	0.11126	0.86124	0.82555	2.21572	0.07989	0.06008	0.06183
650388.61	4181843.03	650388.61_4181843.03	2.39386	5.95166	1.11399	0.11261	0.83844	0.868	2.39386	0.08068	0.06055	0.06225
650408.61	4181843.03	650408.61_4181843.03	2.56278	6.29969	1.18319	0.1139	0.81726	0.90766	2.56278	0.0814	0.06097	0.06262
650428.61	4181843.03	650428.61_4181843.03	2.72506	6.7566	1.2565	0.11517	0.79782	0.9438	2.72506	0.08208	0.06134	0.06294
650448.61	4181843.03	650448.61_4181843.03	2.90027	7.32597	1.33804	0.11645	0.77909	0.98199	2.90027	0.08276	0.06171	0.06325
650468.61	4181843.03	650468.61_4181843.03	2.9885	8.06254	1.39685	0.11756	0.76271	1.00229	2.9885	0.08325	0.06195	0.06343
650488.61	4181843.03	650488.61_4181843.03	3.24676	9.08913	1.51227	0.119	0.74445	1.05482	3.24676	0.08404	0.0624	0.06382
650508.61	4181843.03	650508.61_4181843.03	3.55057	10.41753	1.64775	0.12046	0.72675	1.11334	3.55057	0.08485	0.06285	0.06422
650528.61	4181843.03	650528.61_4181843.03	3.86388	11.92187	1.79186	0.12188	0.71015	1.17013	3.86388	0.08561	0.06327	0.06457
650548.61	4181843.03	650548.61_4181843.03	4.23473	13.33211	1.96214	0.12332	0.69411	1.23349	4.23473	0.08639	0.06369	0.06493
650568.61	4181843.03	650568.61_4181843.03	4.63468	14.45801	2.14782	0.12475	0.67893	1.29738	4.63468	0.08714	0.06409	0.06527
650588.61	4181843.03	650588.61_4181843.03	4.98986	14.99206	2.30775	0.12606	0.66502	1.34856	4.98986	0.08776	0.06439	0.06551
649888.61	4181863.03	649888.61_4181863.03	0.73102	1.86749	0.43592	0.08761	1.74649	0.40749	0.73102	0.06654	0.05204	0.05471
649908.61	4181863.03	649908.61_4181863.03	0.75826	1.98043	0.44808	0.08843	1.6853	0.41662	0.75826	0.06699	0.05232	0.05496
649928.61	4181863.03	649928.61_4181863.03	0.78627	2.10787	0.46068	0.08925	1.65021	0.42559	0.78627	0.06742	0.05258	0.0552
649948.61	4181863.03	649948.61_4181863.03	0.81653	2.24246	0.47389	0.09008	1.59209	0.4355	0.81653	0.06788	0.05287	0.05546
649968.61	4181863.03	649968.61_4181863.03	0.85025	2.37978	0.48811	0.09096	1.53524	0.44685	0.85025	0.06839	0.05318	0.05574
649988.61	4181863.03	649988.61_4181863.03	0.88537	2.52743	0.50288	0.09183	1.48277	0.45819	0.88537	0.06888	0.05348	0.05602
650008.61	4181863.03	650008.61_4181863.03	0.92399	2.67117	0.51844	0.09272	1.41356	0.47105	0.92399	0.06941	0.05382	0.05632
650028.61	4181863.03	650028.61_4181863.03	0.96381	2.83071	0.53484	0.09362	1.3691	0.48318	0.96381	0.06991	0.05412	0.05659
650048.61	4181863.03	650048.61_4181863.03	1.00513	3.00184	0.55204	0.09451	1.34286	0.49496	1.00513	0.07038	0.0544	0.05684
650068.61	4181863.03	650068.61_4181863.03	1.05038	3.16961	0.57016	0.09542	1.30144	0.50804	1.05038	0.07089	0.05471	0.05711

650088.61	4181863.03	650088.61_4181863.03	1.10004	3.3358	0.58953	0.09636	1.26148	0.52229	1.10004	0.07142	0.05502	0.0574
650108.61	4181863.03	650108.61_4181863.03	1.15377	3.50325	0.61009	0.09731	1.2234	0.53732	1.15377	0.07195	0.05535	0.05768
650128.61	4181863.03	650128.61_4181863.03	1.21075	3.67648	0.63171	0.09826	1.18762	0.55254	1.21075	0.07249	0.05566	0.05796
650148.61	4181863.03	650148.61_4181863.03	1.25226	3.87855	0.64838	0.09904	1.15746	0.56139	1.25226	0.07286	0.05585	0.05811
650168.61	4181863.03	650168.61_4181863.03	1.32666	4.04785	0.67532	0.1001	1.12307	0.58097	1.32666	0.07348	0.05622	0.05845
650188.61	4181863.03	650188.61_4181863.03	1.41934	4.17943	0.70645	0.10126	1.07788	0.6066	1.41934	0.07422	0.05669	0.05888
650208.61	4181863.03	650208.61_4181863.03	1.49702	4.36984	0.73462	0.10227	1.05789	0.6245	1.49702	0.07477	0.057	0.05916
650228.61	4181863.03	650228.61_4181863.03	1.57997	4.56642	0.76435	0.10329	1.02971	0.64314	1.57997	0.07532	0.05732	0.05944
650248.61	4181863.03	650248.61_4181863.03	1.66941	4.76918	0.79607	0.10432	1.0025	0.66288	1.66941	0.07589	0.05765	0.05972
650268.61	4181863.03	650268.61_4181863.03	1.76767	4.97904	0.83047	0.10538	0.97607	0.68427	1.76767	0.07649	0.05798	0.06001
650288.61	4181863.03	650288.61_4181863.03	1.87408	5.20325	0.86773	0.10647	0.95062	0.70689	1.87408	0.07709	0.05833	0.06031
650308.61	4181863.03	650308.61_4181863.03	1.99175	5.44375	0.90903	0.1076	0.92592	0.73154	1.99175	0.07772	0.05868	0.06062
650328.61	4181863.03	650328.61_4181863.03	2.09996	5.72457	0.94883	0.10867	0.90311	0.75305	2.09996	0.07829	0.05899	0.06089
650348.61	4181863.03	650348.61_4181863.03	2.21923	6.0274	0.9932	0.10979	0.88077	0.77684	2.21923	0.07888	0.05932	0.06117
650368.61	4181863.03	650368.61_4181863.03	2.41165	6.35138	1.05922	0.11113	0.85707	0.81539	2.41165	0.07968	0.05979	0.06159
650388.61	4181863.03	650388.61_4181863.03	2.58685	6.74275	1.12206	0.11239	0.83545	0.84894	2.58685	0.08039	0.06019	0.06194
650408.61	4181863.03	650408.61_4181863.03	2.74436	7.25655	1.18398	0.11358	0.81578	0.87717	2.74436	0.08101	0.06053	0.06222
650428.61	4181863.03	650428.61_4181863.03	2.93067	7.8714	1.25618	0.11484	0.79633	0.91019	2.93067	0.08168	0.0609	0.06254
650448.61	4181863.03	650448.61_4181863.03	3.04219	8.59442	1.31132	0.11593	0.77889	0.93024	3.04219	0.08219	0.06114	0.06273
649868.61	4181883.03	649868.61_4181883.03	0.72138	1.76243	0.42383	0.08659	1.74106	0.39774	0.72138	0.06574	0.05155	0.05432
649888.61	4181883.03	649888.61_4181883.03	0.74901	2.02685	0.4367	0.08748	1.72634	0.40329	0.74901	0.06618	0.05172	0.05444
649908.61	4181883.03	649908.61_4181883.03	0.77692	2.16228	0.44882	0.08829	1.69291	0.41186	0.77692	0.06661	0.05199	0.05468
649928.61	4181883.03	649928.61_4181883.03	0.80626	2.31058	0.46133	0.0891	1.63424	0.42082	0.80626	0.06705	0.05225	0.05492
649948.61	4181883.03	649948.61_4181883.03	0.83819	2.46797	0.47462	0.08994	1.57748	0.4307	0.83819	0.06752	0.05254	0.05518
649968.61	4181883.03	649968.61_4181883.03	0.87154	2.6376	0.48838	0.09077	1.52445	0.44071	0.87154	0.06799	0.05282	0.05543
649988.61	4181883.03	649988.61_4181883.03	0.90876	2.8096	0.50337	0.09165	1.47279	0.45203	0.90876	0.0685	0.05313	0.05571
650008.61	4181883.03	650008.61_4181883.03	0.95129	2.96593	0.51933	0.09257	1.40197	0.46583	0.95129	0.06907	0.05349	0.05605
650028.61	4181883.03	650028.61_4181883.03	0.99315	3.14873	0.53576	0.09346	1.35816	0.47782	0.99315	0.06957	0.05379	0.05632
650048.61	4181883.03	650048.61_4181883.03	1.03786	3.33616	0.5531	0.09436	1.31699	0.49023	1.03786	0.07008	0.0541	0.05659
650068.61	4181883.03	650068.61_4181883.03	1.08564	3.52771	0.57141	0.09527	1.27827	0.50305	1.08564	0.07059	0.0544	0.05686
650088.61	4181883.03	650088.61_4181883.03	1.13784	3.71445	0.59081	0.0962	1.23982	0.51701	1.13784	0.07112	0.05471	0.05714
650108.61	4181883.03	650108.61_4181883.03	1.19377	3.90498	0.61135	0.09714	1.20388	0.53136	1.19377	0.07165	0.05503	0.05742
650128.61	4181883.03	650128.61_4181883.03	1.2543	4.09597	0.63318	0.09809	1.18036	0.5464	1.2543	0.0722	0.05535	0.0577
650148.61	4181883.03	650148.61_4181883.03	1.29965	4.3326	0.65082	0.09888	1.15121	0.55496	1.29965	0.07257	0.05553	0.05785
650168.61	4181883.03	650168.61_4181883.03	1.35513	4.52466	0.67084	0.09975	1.12004	0.56734	1.35513	0.07303	0.05579	0.05806
650188.61	4181883.03	650188.61_4181883.03	1.45429	4.71304	0.70379	0.10092	1.08596	0.59104	1.45429	0.07376	0.05623	0.05847
650208.61	4181883.03	650208.61_4181883.03	1.55032	4.89042	0.73521	0.10202	1.0542	0.61295	1.55032	0.07442	0.05663	0.05883
650228.61	4181883.03	650228.61_4181883.03	1.63687	5.11084	0.76401	0.10302	1.02634	0.63031	1.63687	0.07497	0.05694	0.0591
650248.61	4181883.03	650248.61_4181883.03	1.72795	5.34238	0.79389	0.10403	0.99963	0.64788	1.72795	0.07552	0.05724	0.05936
650268.61	4181883.03	650268.61_4181883.03	1.84809	5.56172	0.83187	0.10516	0.97219	0.67168	1.84809	0.07618	0.05763	0.0597
650288.61	4181883.03	650288.61_4181883.03	1.97265	5.80808	0.87111	0.10628	0.94637	0.69498	1.97265	0.07682	0.05799	0.06002
650308.61	4181883.03	650308.61_4181883.03	2.10739	6.08301	0.91334	0.10741	0.92167	0.71911	2.10739	0.07747	0.05835	0.06034
650328.61	4181883.03	650328.61_4181883.03	2.23478	6.41997	0.95448	0.1085	0.899	0.74003	2.23478	0.07805	0.05867	0.0606
650348.61	4181883.03	650348.61_4181883.03	2.35478	6.79465	0.99484	0.10956	0.87745	0.75912	2.35478	0.07859	0.05895	0.06084
650368.61	4181883.03	650368.61_4181883.03	2.54922	7.22126	1.05537	0.11084	0.85474	0.79086	2.54922	0.07933	0.05937	0.06121
650388.61	4181883.03	650388.61_4181883.03	2.73365	7.74209	1.11504	0.11205	0.83365	0.81924	2.73365	0.08001	0.05974	0.06153
650408.61	4181883.03	650408.61_4181883.03	2.96186	8.38438	1.18759	0.11335	0.8128	0.85326	2.96186	0.08074	0.06015	0.06188
650428.61	4181883.03	650428.61_4181883.03	3.1727	9.23553	1.25852	0.11458	0.79358	0.88254	3.1727	0.0814	0.06051	0.06218
649868.61	4181903.03	649868.61_4181903.03	0.74035	1.91569	0.42421	0.08649	1.71955	0.39357	0.74035	0.06541	0.05124	0.05405
649888.61	4181903.03	649888.61_4181903.03	0.76889	2.20846	0.4369	0.08738	1.70162	0.39934	0.76889	0.06585	0.05141	0.05418
649908.61	4181903.03	649908.61_4181903.03	0.79826	2.36838	0.44906	0.08819	1.67145	0.40789	0.79826	0.06629	0.05168	0.05442
649928.61	4181903.03	649928.61_4181903.03	0.82878	2.54774	0.46155	0.08899	1.61565	0.41649	0.82878	0.06673	0.05194	0.05466
649948.61	4181903.03	649948.61_4181903.03	0.86073	2.74132	0.47439	0.08979	1.56255	0.42539	0.86073	0.06718	0.05221	0.05489
649968.61	4181903.03	649968.61_4181903.03	0.89438	2.94519	0.48756	0.0906	1.512	0.4346	0.89438	0.06763	0.05247	0.05513
649988.61	4181903.03	649988.61_4181903.03	0.93866	3.12716	0.50391	0.09156	1.45694	0.44831	0.93866	0.06823	0.05285	0.05548
650008.61	4181903.03	650008.61_4181903.03	0.98088	3.32307	0.51941	0.09243	1.38936	0.46048	0.98088	0.06876	0.05317	0.05577
650028.61	4181903.03	650028.61_4181903.03	1.02524	3.53034	0.53574	0.09331	1.34533	0.47252	1.02524	0.06928	0.05348	0.05605
650048.61	4181903.03	650048.61_4181903.03	1.07224	3.75003	0.55311	0.09421	1.30633	0.48438	1.07224	0.06978	0.05378	0.05631
650068.61	4181903.03	650068.61_4181903.03	1.12251	3.97028	0.57139	0.09511	1.26902	0.49673	1.12251	0.07029	0.05407	0.05657
650088.61	4181903.03	650088.61_4181903.03	1.17731	4.18217	0.59074	0.09603	1.2317	0.51019	1.17731	0.07082	0.05438	0.05685
650108.61	4181903.03	650108.61_4181903.03	1.23689	4.38927	0.61127	0.09697	1.19543	0.52452	1.23689	0.07137	0.0547	0.05714
650128.61	4181903.03	650128.61_4181903.03	1.30114	4.59804	0.63307	0.09792	1.16126	0.53933	1.30114	0.07192	0.05502	0.05742
650148.61	4181903.03	650148.61_4181903.03	1.36256	4.84515	0.65492	0.09881	1.14219	0.55141	1.36256	0.0724	0.05528	0.05764
650168.61	4181903.03	650168.61_4181903.03	1.41513	5.08842	0.67299	0.09962	1.11325	0.56107	1.41513	0.07281	0.05549	0.05781
650188.61	4181903.03	650188.61_4181903.03	1.48534	5.30047	0.69609	0.10056	1.08299	0.57523	1.48534	0.07332	0.05578	0.05805
650208.61	4181903.03	650208.61_4181903.03	1.57454	5.52611	0.72425	0.10159	1.05296	0.59298	1.57454	0.07392	0.05612	0.05836
650228.61	4181903.03	650228.61_4181903.03	1.66481	5.75299	0.75241	0.1026	1.02458	0.60993	1.66481	0.07449	0.05644	0.05863
650248.61	4181903.03	650248.61_4181903.03	1.76409	5.99111	0.78276	0.10363	0.99725	0.62776	1.76409	0.07508	0.05676	0.05892
650288.61	4181903.03	650288.61_4181903.03	2.02221	6.56063	0.85834	0.10589	0.94458	0.67139	2.02221	0.07638	0.05751	0.05957
650308.61	4181903.03	650308.61_4181903.03	2.21038	6.86083	0.91047	0.10719	0.91803	0.70209	2.21038	0.07719	0.05798	0.06
650328.61	4181903.03	650328.61_4181903.03	2.38142	7.22046	0.95827	0.10837	0.89405	0.72745	2.38142	0.07788	0.05836	0.06033
650348.61	4181903.03	650348.61_4181903.03	2.51573	7.70216	0.99794	0.10941	0.87308	0.74427	2.51573	0.07841	0.05863	0.06055
650368.61	4181903.03	650368.61_4181903.03	2.73803	8.22593	1.05897	0.11068	0.85044	0.77439	2.73803	0.07915	0.05905	0.06092
650388.61	4181903.03	650388.61_4181903.03	2.96611	8.89074	1.12231	0.11191	0.82918	0.80305	2.96611	0.07986	0.05944	0.06125
650408.61	4181903.03	650408.61_4181903.03	3.12714	9.76215	1.17236	0.11299	0.81046	0.82051	3.12714	0.0804	0.05971	0.06146
649868.61	4181923.03	649868.61_4181923.03	0.76093	2.10095	0.42411	0.08642	1.7001	0.38917	0.76093	0.06512	0.05092	0.05376
649888.61	4181923.03	649888.61_4181923.03	0.79049	2.41914	0.43649	0.08728	1.6743	0.39549	0.79049	0.06556	0.05112	0.05393
649908.61	4181923.03	649908.61_4181923.03	0.82095	2.61674	0.44862	0.08809	1.64991	0.40357	0.82095	0.066	0.05137	0.05415
649928.61	4181923.03	649928.61_4181923.03	0.85267	2.83622	0.46105	0.08889	1.5966	0.4119	0.85267	0.06644	0.05163	0.05438
649948.61	4181923.03	649948.61_4181923.03	0.88687	3.06827	0.47405	0.0897	1.5447	0.42095	0.88687	0.0669	0.0519	0.05462
649968.61	4181923.03	649968.61_4181923.03	0.92649	3.29728	0.48842	0.09057	1.49217	0.43192	0.92649	0.06743	0.05222	0.05491
649988.61	4181923.03	649988.61_4181923.03	0.96898	3.51771	0.50318	0.09144	1.42016	0.44391	0.96898	0.06798	0.05256	0.05522
650008.61	4181923.03	650008.61_4181923.03	1.01218	3.76871	0.51865	0.0923	1.37768	0.45464	1.01218	0.06847	0.05285	0.05548
650028.61	4181923.03	650028.61_4181923.03	1.05841	4.02	0.53494	0.09317	1.33696	0.46584	1.05841	0.06898	0.05314	0.05575
650048.61	4181923.03	650048.61_4181923.03	1.10777	4.27137	0.55211	0.09406	1.31313	0.47743	1.10777	0.06949	0.05344	0.05601
650068.61	4181923.03	650068.61_4181923.03	1.16124	4.51508	0.57025	0.09495	1.27403	0.48977	1.16124	0.07001	0.05374	0.05628
650088.61	4181923.03	650088.61_4181923.03	1.21918	4.75216	0.58946	0.09587	1.23647	0.50282	1.21918	0.07055	0.05405	0.05655
650108.61	4181923.03	650108.61_4181923.03	1.28302	4.97535	0.60988	0.0968	1.18741	0.51706	1.28302	0.07111	0.05438	0.05685
650128.61	4181923.03	650128.61_4181923.03	1.35144	5.20157	0.63153	0.09774	1.15337	0.53157	1.35144	0.07167	0.0547	0.05713
650148.61	4181923.03	650148.61_4181923.03	1.42551	5.43088	0.65457	0.09871	1.12125	0.54651	1.42551	0.07224	0.05502	0.05741
650168.61	4181923.03	650168.61_4181923.03	1.50291	5.68429	0.67889	0.09967	1.10189	0.56068	1.50291	0.07278	0.05532	0.05767
650188.61	4181923.03	650188.61_4181923.03	1.58411	5.946	0.7038	0.10062	1.07278	0.57488	1.58411	0.07331	0.05561	0.05792
650208.61	4181923.03	650208.61_4181923.03	1.68058	6.18985	0.73186	0.10164	1.0434	0.59189	1.68058	0.0739	0.05595	0.05821
650228.61	4181923.03	650228.61_4181923.03	1.79176	6.43118	0.76293	0.10271	1.01454	0.61094	1.79176	0.07454	0.05631	0.05853
650248.61	4181923.03	650248.61_4181923.03	1.90117	6.72831	0.79369	0.10372	0.98836	0.62748	1.90117	0.07511	0.05661	0.05879
650268.61	4181923.03	650268.61_4181923.03	1.99073	7.07061	0.81911	0.10463	0.96464	0.63903	1.99073	0.07557	0.05684	0.05897
650328.61	4181923.03	650328.61_4181923.03	2.46428	8.23283	0.94206	0.10802	0.8915	0.7021	2.46428	0.07753	0.05792	0.0599
650348.61	4181923.03	650348.61_4181923.03	2.71074	8.73737	1.00192	0.10932	0.8674	0.73256	2.71074	0.07833	0.05838	0.06031
650368.61	4181923.03	650368.61_4181923.03	2.9522	9.38674	1.0603	0.11054	0.8452	0.75935	2.9522	0.07905	0.05877	0.06065
650388.61	4181923.03	650388.61_4181923.03	3.20717	10.2667	1.12191	0.11175	0.82438	0.78493	3.20717	0.07975	0.05914	0.06097

649868.61	4181943.03	649868.61_4181943.03	0.78271	2.29427	0.42319	0.08634	1.67116	0.38512	0.78271	0.06484	0.05063	0.0535
649888.61	4181943.03	649888.61_4181943.03	0.81337	2.67713	0.43555	0.0872	1.6503	0.39114	0.81337	0.06529	0.05081	0.05366
649908.61	4181943.03	649908.61_4181943.03	0.84506	2.92101	0.44759	0.088	1.62819	0.3991	0.84506	0.06573	0.05107	0.05388
649928.61	4181943.03	649928.61_4181943.03	0.87846	3.19116	0.45996	0.08879	1.57657	0.40741	0.87846	0.06618	0.05133	0.05411
649948.61	4181943.03	649948.61_4181943.03	0.91748	3.44617	0.47333	0.08964	1.49745	0.41822	0.91748	0.06672	0.05166	0.05442
649968.61	4181943.03	649968.61_4181943.03	0.95769	3.71562	0.48698	0.09046	1.44541	0.42889	0.95769	0.06725	0.05197	0.0547
649988.61	4181943.03	649988.61_4181943.03	0.99983	4.02208	0.50166	0.09131	1.40489	0.43858	0.99983	0.06773	0.05225	0.05495
650008.61	4181943.03	650008.61_4181943.03	1.04491	4.32506	0.51701	0.09217	1.36498	0.44879	1.04491	0.06822	0.05254	0.0552
650028.61	4181943.03	650028.61_4181943.03	1.09338	4.61927	0.53312	0.09304	1.32571	0.45961	1.09338	0.06873	0.05283	0.05545
650048.61	4181943.03	650048.61_4181943.03	1.14548	4.90454	0.55009	0.09391	1.30233	0.47094	1.14548	0.06924	0.05312	0.05572
650068.61	4181943.03	650068.61_4181943.03	1.20174	5.17963	0.568	0.0948	1.26422	0.48283	1.20174	0.06977	0.05342	0.05598
650088.61	4181943.03	650088.61_4181943.03	1.2626	5.4455	0.58693	0.09571	1.22764	0.49527	1.2626	0.07031	0.05373	0.05625
650108.61	4181943.03	650108.61_4181943.03	1.32924	5.69911	0.60708	0.09663	1.19221	0.50856	1.32924	0.07087	0.05404	0.05653
650128.61	4181943.03	650128.61_4181943.03	1.40183	5.94671	0.62849	0.09758	1.15815	0.52252	1.40183	0.07143	0.05437	0.05681
650148.61	4181943.03	650148.61_4181943.03	1.47987	6.2	0.65114	0.09853	1.12581	0.53669	1.47987	0.072	0.05468	0.05709
650168.61	4181943.03	650168.61_4181943.03	1.56554	6.45234	0.67533	0.09951	1.09459	0.55165	1.56554	0.07258	0.05501	0.05738
650188.61	4181943.03	650188.61_4181943.03	1.66059	6.70372	0.70132	0.10051	1.06429	0.56763	1.66059	0.07318	0.05534	0.05767
650208.61	4181943.03	650208.61_4181943.03	1.76487	6.96715	0.7291	0.10153	1.03524	0.58419	1.76487	0.07379	0.05568	0.05796
650228.61	4181943.03	650228.61_4181943.03	1.88036	7.24433	0.75896	0.10257	1.00726	0.60155	1.88036	0.07441	0.05603	0.05826
650248.61	4181943.03	650248.61_4181943.03	2.00929	7.5384	0.79118	0.10364	0.9721	0.61988	2.00929	0.07504	0.05637	0.05856
650268.61	4181943.03	650268.61_4181943.03	2.15187	7.86909	0.82593	0.10472	0.94657	0.63866	2.15187	0.07568	0.05672	0.05887
650348.61	4181943.03	650348.61_4181943.03	2.76721	9.95065	0.97208	0.10885	0.865	0.70105	2.76721	0.07794	0.05788	0.05982
650368.61	4181943.03	650368.61_4181943.03	3.1464	10.76861	1.05087	0.11033	0.84041	0.73968	3.1464	0.07893	0.05846	0.06034
650388.61	4181943.03	650388.61_4181943.03	3.44054	11.89697	1.11223	0.11152	0.81962	0.76399	3.44054	0.07964	0.05884	0.06066
649868.61	4181963.03	649868.61_4181963.03	0.806	2.59666	0.42204	0.08628	1.65119	0.3806	0.806	0.06462	0.05032	0.05322
649888.61	4181963.03	649888.61_4181963.03	0.83776	2.98349	0.43399	0.08711	1.62174	0.38723	0.83776	0.06507	0.05054	0.0534
649908.61	4181963.03	649908.61_4181963.03	0.87146	3.27744	0.44588	0.08791	1.57122	0.39568	0.87146	0.06555	0.05081	0.05365
649928.61	4181963.03	649928.61_4181963.03	0.9075	3.60329	0.4583	0.08871	1.52178	0.40459	0.9075	0.06603	0.0511	0.05391
649948.61	4181963.03	649948.61_4181963.03	0.94611	3.94963	0.47132	0.08953	1.47449	0.41389	0.94611	0.06653	0.05138	0.05416
649968.61	4181963.03	649968.61_4181963.03	0.98712	4.31778	0.48509	0.09035	1.43257	0.4231	0.98712	0.06701	0.05166	0.05441
649988.61	4181963.03	649988.61_4181963.03	1.03121	4.67871	0.49947	0.09119	1.39097	0.43288	1.03121	0.06751	0.05195	0.05466
650008.61	4181963.03	650008.61_4181963.03	1.07877	5.02578	0.51458	0.09204	1.35019	0.44322	1.07877	0.06802	0.05224	0.05492
650028.61	4181963.03	650028.61_4181963.03	1.13014	5.35508	0.53048	0.0929	1.31059	0.45411	1.13014	0.06855	0.05254	0.05519
650048.61	4181963.03	650048.61_4181963.03	1.1851	5.67681	0.54725	0.09378	1.27391	0.46514	1.1851	0.06907	0.05284	0.05545
650068.61	4181963.03	650068.61_4181963.03	1.24504	5.973	0.56495	0.09467	1.23732	0.47698	1.24504	0.06961	0.05315	0.05572
650088.61	4181963.03	650088.61_4181963.03	1.30894	6.26934	0.58362	0.09557	1.2167	0.48883	1.30894	0.07015	0.05345	0.05598
650108.61	4181963.03	650108.61_4181963.03	1.37828	6.55486	0.60334	0.09649	1.18256	0.50121	1.37828	0.0707	0.05375	0.05625
650128.61	4181963.03	650128.61_4181963.03	1.45481	6.82446	0.62435	0.09743	1.14921	0.51456	1.45481	0.07127	0.05407	0.05653
650148.61	4181963.03	650148.61_4181963.03	1.53706	7.10294	0.64652	0.09838	1.11757	0.52802	1.53706	0.07184	0.05438	0.0568
650168.61	4181963.03	650168.61_4181963.03	1.62833	7.37513	0.6703	0.09936	1.08673	0.54244	1.62833	0.07243	0.05471	0.05708
650188.61	4181963.03	650188.61_4181963.03	1.73072	7.63872	0.69593	0.10037	1.05651	0.55816	1.73072	0.07304	0.05505	0.05738
650208.61	4181963.03	650208.61_4181963.03	1.84148	7.92983	0.72314	0.10138	1.02794	0.57385	1.84148	0.07365	0.05539	0.05767
650228.61	4181963.03	650228.61_4181963.03	1.96274	8.24839	0.75226	0.10241	1.00065	0.58981	1.96274	0.07427	0.05572	0.05796
650248.61	4181963.03	650248.61_4181963.03	2.10179	8.56577	0.78392	0.10348	0.97367	0.60759	2.10179	0.07492	0.05608	0.05827
650268.61	4181963.03	650268.61_4181963.03	2.25451	8.93535	0.81797	0.10455	0.94025	0.62539	2.25451	0.07556	0.05643	0.05857
650288.61	4181963.03	650288.61_4181963.03	2.42903	9.32686	0.85491	0.10564	0.9147	0.64496	2.42903	0.07624	0.0568	0.05889
650368.61	4181963.03	650368.61_4181963.03	3.19406	12.39468	1.01326	0.1098	0.83796	0.70521	3.19406	0.07857	0.05798	0.05984
649868.61	4181983.03	649868.61_4181983.03	0.82956	2.92027	0.42033	0.0862	1.62695	0.37629	0.82956	0.06442	0.05003	0.05295
649888.61	4181983.03	649888.61_4181983.03	0.86243	3.37858	0.43206	0.08702	1.59665	0.38297	0.86243	0.06488	0.05026	0.05314
649908.61	4181983.03	649908.61_4181983.03	0.89719	3.77265	0.44385	0.08781	1.55026	0.39101	0.89719	0.06534	0.05053	0.05338
649928.61	4181983.03	649928.61_4181983.03	0.93423	4.21283	0.4562	0.08861	1.50567	0.39935	0.93423	0.06582	0.0508	0.05362
649948.61	4181983.03	649948.61_4181983.03	0.97384	4.66989	0.46906	0.08942	1.46202	0.40808	0.97384	0.06631	0.05108	0.05386
649968.61	4181983.03	649968.61_4181983.03	1.01578	5.13238	0.48253	0.09023	1.44192	0.41693	1.01578	0.0668	0.05135	0.0541
649988.61	4181983.03	649988.61_4181983.03	1.06191	5.5581	0.49667	0.09106	1.39811	0.42677	1.06191	0.06731	0.05164	0.05437
650008.61	4181983.03	650008.61_4181983.03	1.11124	5.96269	0.51154	0.09191	1.35654	0.43684	1.11124	0.06783	0.05194	0.05463
650028.61	4181983.03	650028.61_4181983.03	1.16481	6.33235	0.52717	0.09277	1.31636	0.4475	1.16481	0.06837	0.05224	0.05489
650048.61	4181983.03	650048.61_4181983.03	1.22237	6.67935	0.54363	0.09364	1.27812	0.45843	1.22237	0.06891	0.05255	0.05516
650068.61	4181983.03	650068.61_4181983.03	1.2848	7.00192	0.561	0.09453	1.24132	0.46986	1.2848	0.06946	0.05285	0.05543
650088.61	4181983.03	650088.61_4181983.03	1.35278	7.30462	0.57936	0.09544	1.20584	0.48183	1.35278	0.07002	0.05317	0.05571
650108.61	4181983.03	650108.61_4181983.03	1.42706	7.59229	0.59879	0.09636	1.15872	0.49441	1.42706	0.07059	0.05349	0.05599
650128.61	4181983.03	650128.61_4181983.03	1.50748	7.88318	0.61938	0.0973	1.12698	0.50724	1.50748	0.07117	0.0538	0.05626
650148.61	4181983.03	650148.61_4181983.03	1.59513	8.1772	0.64125	0.09826	1.10758	0.52046	1.59513	0.07175	0.05413	0.05654
650168.61	4181983.03	650168.61_4181983.03	1.69288	8.45453	0.66454	0.09923	1.06591	0.53483	1.69288	0.07236	0.05446	0.05683
650188.61	4181983.03	650188.61_4181983.03	1.79915	8.75904	0.68941	0.10023	1.03742	0.54922	1.79915	0.07297	0.05479	0.05711
650208.61	4181983.03	650208.61_4181983.03	1.91645	9.08006	0.716	0.10123	1.00997	0.56413	1.91645	0.07358	0.05513	0.0574
650228.61	4181983.03	650228.61_4181983.03	2.04594	9.42901	0.74455	0.10226	0.98371	0.57945	2.04594	0.0742	0.05546	0.05769
650248.61	4181983.03	650248.61_4181983.03	2.19271	9.77967	0.77529	0.10331	0.95706	0.59621	2.19271	0.07486	0.05582	0.058
650268.61	4181983.03	650268.61_4181983.03	2.35564	10.18594	0.8085	0.10436	0.93197	0.6132	2.35564	0.07552	0.05617	0.0583
650288.61	4181983.03	650288.61_4181983.03	2.53547	10.69008	0.84453	0.10544	0.90907	0.62972	2.53547	0.07616	0.05651	0.05858
650308.61	4181983.03	650308.61_4181983.03	2.74018	11.26215	0.88372	0.10653	0.88624	0.64741	2.74018	0.07683	0.05687	0.05888
649868.61	4182003.03	649868.61_4182003.03	0.85282	3.39173	0.41847	0.08613	1.6108	0.37156	0.85282	0.06426	0.04974	0.05266
649888.61	4182003.03	649888.61_4182003.03	0.88615	3.92786	0.42995	0.08693	1.57932	0.37805	0.88615	0.06469	0.04996	0.05285
649908.61	4182003.03	649908.61_4182003.03	0.9217	4.47899	0.44155	0.08771	1.53534	0.38573	0.9217	0.06516	0.05023	0.05308
649928.61	4182003.03	649928.61_4182003.03	0.95984	5.06992	0.45364	0.0885	1.51525	0.39399	0.95984	0.06564	0.05051	0.05333
649948.61	4182003.03	649948.61_4182003.03	1.00077	5.66143	0.46627	0.08929	1.46949	0.40262	1.00077	0.06614	0.05079	0.05358
649968.61	4182003.03	649968.61_4182003.03	1.04418	6.23059	0.47946	0.0901	1.42616	0.41138	1.04418	0.06664	0.05107	0.05382
649988.61	4182003.03	649988.61_4182003.03	1.09136	6.74405	0.49331	0.09092	1.38395	0.42075	1.09136	0.06716	0.05136	0.05408
650008.61	4182003.03	650008.61_4182003.03	1.14236	7.20226	0.5079	0.09176	1.34325	0.43057	1.14236	0.06769	0.05166	0.05434
650028.61	4182003.03	650028.61_4182003.03	1.19678	7.62112	0.52313	0.09261	1.30457	0.44057	1.19678	0.06822	0.05195	0.0546
650048.61	4182003.03	650048.61_4182003.03	1.25675	7.98661	0.53936	0.09349	1.26671	0.45136	1.25675	0.06877	0.05226	0.05487
650068.61	4182003.03	650068.61_4182003.03	1.3213	8.33016	0.55637	0.09438	1.23056	0.46241	1.3213	0.06933	0.05257	0.05514
650088.61	4182003.03	650088.61_4182003.03	1.39173	8.65226	0.57439	0.09528	1.19566	0.47398	1.39173	0.06989	0.05289	0.05541
650108.61	4182003.03	650108.61_4182003.03	1.46812	8.96893	0.59338	0.0962	1.16219	0.48588	1.46812	0.07047	0.0532	0.05568
650128.61	4182003.03	650128.61_4182003.03	1.55234	9.27136	0.61358	0.09714	1.12965	0.49849	1.55234	0.07107	0.05353	0.05597
650148.61	4182003.03	650148.61_4182003.03	1.6443	9.58061	0.63498	0.0981	1.09846	0.51143	1.6443	0.07167	0.05385	0.05625
650168.61	4182003.03	650168.61_4182003.03	1.74474	9.90373	0.65771	0.09907	1.06856	0.52466	1.74474	0.07227	0.05418	0.05653
650188.61	4182003.03	650188.61_4182003.03	1.85394	10.25593	0.68179	0.10004	1.04008	0.53795	1.85394	0.07287	0.05451	0.05681
650208.61	4182003.03	650208.61_4182003.03	1.978	10.59453	0.70785	0.10105	1.01193	0.55256	1.978	0.07351	0.05485	0.0571
650228.61	4182003.03	650228.61_4182003.03	2.11658	10.95104	0.73579	0.10208	0.98467	0.56787	2.11658	0.07416	0.0552	0.0574
650248.61	4182003.03	650248.61_4182003.03	2.27071	11.34663	0.76576	0.10311	0.94976	0.5836	2.27071	0.07482	0.05556	0.05771
650268.61	4182003.03	650268.61_4182003.03	2.43922	11.83612	0.79801	0.10415	0.9339	0.59881	2.43922	0.07546	0.0559	0.05799
650288.61	4182003.03	650288.61_4182003.03	2.63115	12.3741	0.833	0.10521	0.90988	0.61503	2.63115	0.07613	0.05626	0.05829
650308.61	4182003.03	650308.61_4182003.03	2.84336	13.04943	0.87066	0.10627	0.88712	0.63086	2.84336	0.07679	0.0566	0.05858
650628.61	4182003.03	650628.61_4182003.03	36.30488	12.69017	2.80616	0.12519	0.60297	0.92168	36.30488	0.0896	0.06327	0.06402
650648.61	4182003.03	650648.61_4182003.03	54.70361	11.19463	2.9775	0.12645	0.5895	0.92462	54.70361	0.09052	0.06376	0.06441
650668.61	4182003.03	650668.61_4182003.03	92.00851	10.01786	3.02999	0.12773	0.57677	0.92081	92.00851	0.09144	0.06425	0.0648
649868.61	4182023.03	649868.61_4182023.03	0.874	4.02571	0.41652	0.08606	1.60225	0.36629	0.874	0.06409	0.04944	0.05236
649888.61	4182023.03	649888.61_4182023.03	0.90755	4.71922	0.42751	0.08682	1.59263	0.3729	0.90755	0.06453	0.04968	0.05256
649908.61	4182023.03	649908.61_4182023.03	0.94443	5.50422	0.43888	0.08759	1.54404	0.38076	0.94443	0.06502	0.04996	0.05281
649928.61	4182023.03	649928.61_4182023.03	0.9835	6.3311	0.45072	0.08837	1.49793	0.38875	0.9835	0.06551	0.05024	0.05305

649948.61	4182023.03	649948.61_4182023.03	1.02618	7.09151	0.4632	0.08917	1.45239	0.39749	1.02618	0.06603	0.05053	0.05331
649968.61	4182023.03	649968.61_4182023.03	1.07096	7.78204	0.47615	0.08997	1.41	0.40609	1.07096	0.06654	0.05081	0.05356
649988.61	4182023.03	649988.61_4182023.03	1.11961	8.36266	0.48978	0.09079	1.36866	0.41526	1.11961	0.06707	0.05111	0.05381
650008.61	4182023.03	650008.61_4182023.03	1.17186	8.86136	0.50405	0.09163	1.32905	0.42474	1.17186	0.0676	0.0514	0.05407
650028.61	4182023.03	650028.61_4182023.03	1.22847	9.29183	0.51909	0.09248	1.29077	0.43466	1.22847	0.06814	0.05171	0.05433
650048.61	4182023.03	650048.61_4182023.03	1.29024	9.66796	0.53498	0.09335	1.2536	0.44516	1.29024	0.06871	0.05202	0.05461
650068.61	4182023.03	650068.61_4182023.03	1.35647	10.0321	0.55162	0.09424	1.21827	0.45577	1.35647	0.06927	0.05233	0.05487
650088.61	4182023.03	650088.61_4182023.03	1.42809	10.38986	0.5691	0.09513	1.18438	0.46663	1.42809	0.06983	0.05264	0.05514
650108.61	4182023.03	650108.61_4182023.03	1.50605	10.74188	0.58756	0.09604	1.15166	0.4779	1.50605	0.07041	0.05295	0.05541
650128.61	4182023.03	650128.61_4182023.03	1.59162	11.08976	0.60715	0.09697	1.11998	0.48965	1.59162	0.071	0.05327	0.05568
650148.61	4182023.03	650148.61_4182023.03	1.68506	11.44618	0.62787	0.09791	1.08949	0.50172	1.68506	0.0716	0.05359	0.05595
650168.61	4182023.03	650168.61_4182023.03	1.78766	11.8139	0.64986	0.09886	1.06008	0.51417	1.78766	0.0722	0.05391	0.05623
650188.61	4182023.03	650188.61_4182023.03	1.89877	12.21614	0.67293	0.09982	1.03199	0.52661	1.89877	0.07281	0.05424	0.0565
650208.61	4182023.03	650208.61_4182023.03	2.02557	12.61253	0.69815	0.10081	1.00435	0.54017	2.02557	0.07344	0.05458	0.05679
650228.61	4182023.03	650228.61_4182023.03	2.16746	13.03602	0.72527	0.10182	0.97762	0.55428	2.16746	0.0741	0.05493	0.05709
650248.61	4182023.03	650248.61_4182023.03	2.32685	13.49598	0.75446	0.10285	0.9518	0.56893	2.32685	0.07476	0.05528	0.05739
650268.61	4182023.03	650268.61_4182023.03	2.50272	14.03247	0.78552	0.10387	0.92717	0.58353	2.50272	0.07542	0.05563	0.05768
650288.61	4182023.03	650288.61_4182023.03	2.70577	14.61797	0.81961	0.10492	0.90311	0.59918	2.70577	0.07611	0.056	0.05799
650308.61	4182023.03	650308.61_4182023.03	2.9281	15.36834	0.85563	0.10596	0.8804	0.61417	2.9281	0.07678	0.05636	0.05828
650528.61	4182023.03	650528.61_4182023.03	11.01277	21.34935	1.6445	0.11843	0.67502	0.80513	11.01277	0.08525	0.06078	0.06189
650548.61	4182023.03	650548.61_4182023.03	13.34967	18.17403	1.79078	0.11964	0.65498	0.82183	13.34967	0.08613	0.06124	0.06226
650568.61	4182023.03	650568.61_4182023.03	16.53917	15.77509	1.95646	0.12085	0.63987	0.83703	16.53917	0.08703	0.06171	0.06263
650588.61	4182023.03	650588.61_4182023.03	21.07922	13.88778	2.13578	0.12207	0.62524	0.84944	21.07922	0.08794	0.06218	0.06302
650608.61	4182023.03	650608.61_4182023.03	27.86715	12.208	2.31216	0.12329	0.61112	0.85803	27.86715	0.08886	0.06266	0.0634
650628.61	4182023.03	650628.61_4182023.03	38.42705	10.66114	2.45499	0.1245	0.59683	0.86372	38.42705	0.08975	0.06317	0.06381
650648.61	4182023.03	650648.61_4182023.03	56.31353	9.52397	2.53514	0.12573	0.58357	0.86346	56.31353	0.09065	0.06366	0.0642
650668.61	4182023.03	650668.61_4182023.03	92.78539	8.63691	2.54511	0.127	0.57177	0.85725	92.78539	0.09159	0.06415	0.06458
649868.61	4182043.03	649868.61_4182043.03	0.89248	4.83692	0.41416	0.08595	1.5847	0.3617	0.89248	0.06398	0.04919	0.05209
649888.61	4182043.03	649888.61_4182043.03	0.92557	5.94038	0.42467	0.08667	1.57494	0.3678	0.92557	0.0644	0.04941	0.05228
649908.61	4182043.03	649908.61_4182043.03	0.96321	7.15636	0.43581	0.08744	1.52744	0.37544	0.96321	0.0649	0.04969	0.05252
649928.61	4182043.03	649928.61_4182043.03	1.00392	8.31661	0.44755	0.08822	1.48119	0.38358	1.00392	0.06542	0.04999	0.05278
649948.61	4182043.03	649948.61_4182043.03	1.0478	9.27934	0.45986	0.08902	1.43658	0.39211	1.0478	0.06594	0.05028	0.05304
649968.61	4182043.03	649968.61_4182043.03	1.09384	10.0574	0.47257	0.08983	1.39475	0.40059	1.09384	0.06646	0.05057	0.05329
649988.61	4182043.03	649988.61_4182043.03	1.14345	10.66899	0.4859	0.09064	1.35435	0.40945	1.14345	0.067	0.05086	0.05355
650008.61	4182043.03	650008.61_4182043.03	1.19523	11.19798	0.49958	0.09145	1.31643	0.41813	1.19523	0.06752	0.05115	0.05379
650028.61	4182043.03	650028.61_4182043.03	1.25364	11.62173	0.5144	0.09231	1.27847	0.42789	1.25364	0.06808	0.05145	0.05406
650048.61	4182043.03	650048.61_4182043.03	1.31526	12.0317	0.52967	0.09317	1.2426	0.43756	1.31526	0.06863	0.05176	0.05431
650068.61	4182043.03	650068.61_4182043.03	1.38512	12.37668	0.54628	0.09407	1.20681	0.44841	1.38512	0.06922	0.05208	0.0546
650088.61	4182043.03	650088.61_4182043.03	1.45593	12.80157	0.56289	0.09494	1.1741	0.45827	1.45593	0.06978	0.05238	0.05485
650108.61	4182043.03	650108.61_4182043.03	1.53452	13.20636	0.58056	0.09583	1.14195	0.46886	1.53452	0.07035	0.05269	0.05511
650128.61	4182043.03	650128.61_4182043.03	1.62278	13.58728	0.59977	0.09676	1.11037	0.48031	1.62278	0.07096	0.05302	0.05539
650148.61	4182043.03	650148.61_4182043.03	1.71975	13.97422	0.62013	0.0977	1.0799	0.49215	1.71975	0.07157	0.05335	0.05567
650168.61	4182043.03	650168.61_4182043.03	1.82748	14.36251	0.64191	0.09866	1.05035	0.50454	1.82748	0.0722	0.05369	0.05596
650188.61	4182043.03	650188.61_4182043.03	1.9408	14.83685	0.664	0.0996	1.02269	0.51622	1.9408	0.07281	0.05401	0.05622
650208.61	4182043.03	650208.61_4182043.03	2.06832	15.32492	0.68787	0.10057	0.99567	0.5286	2.06832	0.07344	0.05435	0.0565
650228.61	4182043.03	650228.61_4182043.03	2.21905	15.78081	0.71492	0.10158	0.9688	0.54267	2.21905	0.07412	0.05472	0.05682
650248.61	4182043.03	650248.61_4182043.03	2.38689	16.28568	0.74355	0.1026	0.94301	0.55696	2.38689	0.0748	0.05508	0.05713
650268.61	4182043.03	650268.61_4182043.03	2.56914	16.90612	0.77341	0.1036	0.91871	0.57063	2.56914	0.07547	0.05543	0.05742
650288.61	4182043.03	650288.61_4182043.03	2.77194	17.63501	0.80507	0.10461	0.89547	0.58422	2.77194	0.07614	0.05578	0.05771
650508.61	4182043.03	650508.61_4182043.03	9.75412	22.26601	1.46008	0.11673	0.68479	0.7557	9.75412	0.08457	0.06021	0.0613
650528.61	4182043.03	650528.61_4182043.03	11.64972	18.52635	1.57297	0.1179	0.66387	0.77065	11.64972	0.08545	0.06067	0.06168
650548.61	4182043.03	650548.61_4182043.03	14.12612	15.8577	1.69802	0.11908	0.6488	0.78314	14.12612	0.08632	0.06113	0.06204
650568.61	4182043.03	650568.61_4182043.03	17.49251	13.83595	1.8318	0.12027	0.63437	0.79309	17.49251	0.0872	0.06159	0.06241
650588.61	4182043.03	650588.61_4182043.03	22.23522	12.19995	1.96457	0.12146	0.62001	0.80123	22.23522	0.08812	0.06207	0.06279
649948.61	4182063.03	649948.61_4182063.03	1.06419	12.69464	0.45617	0.08886	1.42228	0.38645	1.06419	0.06588	0.05004	0.05277
649968.61	4182063.03	649968.61_4182063.03	1.11253	13.43795	0.46888	0.08968	1.3799	0.39517	1.11253	0.06643	0.05035	0.05303
649988.61	4182063.03	649988.61_4182063.03	1.16302	13.99321	0.4819	0.09049	1.34024	0.40373	1.16302	0.06697	0.05064	0.05329
650008.61	4182063.03	650008.61_4182063.03	1.21594	14.48397	0.49524	0.0913	1.30281	0.41216	1.21594	0.0675	0.05093	0.05353
650028.61	4182063.03	650028.61_4182063.03	1.27609	14.86722	0.50984	0.09216	1.26513	0.42176	1.27609	0.06807	0.05124	0.05381
650048.61	4182063.03	650048.61_4182063.03	1.33829	15.29825	0.52456	0.093	1.23006	0.4309	1.33829	0.06862	0.05154	0.05406
650508.61	4182063.03	650508.61_4182063.03	10.08363	19.09079	1.40131	0.11621	0.67351	0.72402	10.08363	0.08475	0.06011	0.06109
650528.61	4182063.03	650528.61_4182063.03	12.04292	16.03552	1.4997	0.11736	0.65741	0.73652	12.04292	0.08564	0.06059	0.06147
650548.61	4182063.03	650548.61_4182063.03	14.60433	13.86155	1.60353	0.11851	0.64284	0.7453	14.60433	0.08651	0.06105	0.06183
650488.61	4182083.03	650488.61_4182083.03	8.74302	19.4386	1.2627	0.11456	0.68807	0.68318	8.74302	0.08408	0.05959	0.06053
650508.61	4182083.03	650508.61_4182083.03	10.28089	16.16109	1.34267	0.11569	0.66641	0.69444	10.28089	0.08496	0.06006	0.06091
650528.61	4182083.03	650528.61_4182083.03	12.23466	13.8541	1.42579	0.11682	0.65132	0.70289	12.23466	0.08583	0.06052	0.06127
650548.61	4182083.03	650548.61_4182083.03	14.80727	12.12151	1.5089	0.11795	0.63715	0.70885	14.80727	0.0867	0.06098	0.06163
650488.61	4182103.03	650488.61_4182103.03	8.80375	15.97367	1.21463	0.11407	0.68125	0.65603	8.80375	0.08428	0.05955	0.06035
650508.61	4182103.03	650508.61_4182103.03	10.32031	13.63816	1.28326	0.11518	0.65966	0.66506	10.32031	0.08517	0.06003	0.06073
650528.61	4182103.03	650528.61_4182103.03	12.23848	11.94027	1.35151	0.11629	0.64533	0.67058	12.23848	0.08602	0.06048	0.06108
650468.61	4182123.03	650468.61_4182123.03	7.58848	15.10578	1.10847	0.11251	0.68984	0.6225	7.58848	0.08364	0.05907	0.05983
650488.61	4182123.03	650488.61_4182123.03	8.7687	13.05418	1.16626	0.1136	0.66788	0.63096	8.7687	0.08452	0.05956	0.06021
650508.61	4182123.03	650508.61_4182123.03	10.21763	11.50408	1.22339	0.11469	0.65305	0.63659	10.21763	0.08537	0.06001	0.06057
650528.61	4182123.03	650528.61_4182123.03	11.92174	10.36978	1.2741	0.11574	0.64559	0.63635	11.92174	0.0861	0.0604	0.06085
650448.61	4182143.03	650448.61_4182143.03	6.57068	13.61237	1.01923	0.11101	0.69802	0.59264	6.57068	0.08303	0.05863	0.05934
650468.61	4182143.03	650468.61_4182143.03	7.48974	12.03152	1.0684	0.11209	0.67564	0.60036	7.48974	0.0839	0.05911	0.05972
650488.61	4182143.03	650488.61_4182143.03	8.59612	10.75943	1.117	0.11315	0.6603	0.60604	8.59612	0.08474	0.05957	0.06008
650508.61	4182143.03	650508.61_4182143.03	9.95789	9.72042	1.16352	0.11423	0.64625	0.60958	9.95789	0.08556	0.06003	0.06043
650428.61	4182163.03	650428.61_4182163.03	5.70262	11.90642	0.94288	0.10958	0.70592	0.56544	5.70262	0.08243	0.05821	0.05887
650448.61	4182163.03	650448.61_4182163.03	6.42285	10.74728	0.98531	0.11063	0.68292	0.57269	6.42285	0.08328	0.05869	0.05924
650468.61	4182163.03	650468.61_4182163.03	7.27272	9.77664	1.02719	0.11168	0.6671	0.57834	7.27272	0.08412	0.05916	0.05961
650488.61	4182163.03	650488.61_4182163.03	8.28834	8.99131	1.06744	0.11273	0.65348	0.58114	8.28834	0.08491	0.0596	0.05994
650388.61	4182183.03	650388.61_4182183.03	4.50312	11.23886	0.84121	0.1072	0.7303	0.53466	4.50312	0.08107	0.05739	0.05808
650408.61	4182183.03	650408.61_4182183.03	4.97913	10.30023	0.87706	0.10821	0.71328	0.54114	4.97913	0.08186	0.05783	0.05843
650428.61	4182183.03	650428.61_4182183.03	5.54194	9.46735	0.91383	0.10923	0.6899	0.54733	5.54194	0.08268	0.05829	0.05879
650448.61	4182183.03	650448.61_4182183.03	6.20079	8.75065	0.95038	0.11026	0.67414	0.55241	6.20079	0.08349	0.05876	0.05915
650468.61	4182183.03	650468.61_4182183.03	6.93316	8.20232	0.98388	0.11126	0.66678	0.55346	6.93316	0.0842	0.05915	0.05944
650208.61	4182203.03	650208.61_4182203.03	2.1791	12.66164	0.59348	0.09838	0.90437	0.45174	2.1791	0.07468	0.05373	0.05507
650228.61	4182203.03	650228.61_4182203.03	2.3287	12.55454	0.61204	0.09929	0.88026	0.46004	2.3287	0.07538	0.05412	0.05538
650248.61	4182203.03	650248.61_4182203.03	2.49412	12.40196	0.63201	0.10021	0.85714	0.46832	2.49412	0.07609	0.05452	0.0557
650268.61	4182203.03	650268.61_4182203.03	2.6776	12.18474	0.6535	0.10113	0.83498	0.47652	2.6776	0.07681	0.05493	0.05602
650288.61	4182203.03	650288.61_4182203.03	2.88187	11.87691	0.67671	0.10207	0.80417	0.48454	2.88187	0.07754	0.05534	0.05635
650308.61	4182203.03	650308.61_4182203.03	3.11022	11.45774	0.70173	0.10302	0.78425	0.49226	3.11022	0.07828	0.05576	0.05668
650328.61	4182203.03	650328.61_4182203.03	3.36755	10.91506	0.72863	0.10397	0.76514	0.49967	3.36755	0.07902	0.05618	0.05701
650348.61	4182203.03	650348.61_4182203.03	3.65952	10.27502	0.75739	0.10494	0.74689	0.50663	3.65952	0.07977	0.05661	0.05734
650368.61	4182203.03	650368.61_4182203.03	3.99354	9.59059	0.78778	0.10591	0.72944	0.51305	3.99354	0.08053	0.05704	0.05768
650388.61	4182203.03	650388.61_4182203.03	4.37925	8.91337	0.81938	0.1069	0.71231	0.51914	4.37925	0.08131	0.05748	0.05803
650408.61	4182203.03	650408.61_4182203.03	4.82419	8.3189	0.85166	0.1079	0.69639	0.52417	4.82419	0.08208	0.05792	0.05837
650428.61	4182203.03	650428.61_4182203.03	5.3304	7.82046	0.88346	0.10889	0.68826	0.52751	5.3304	0.08282	0.05834	0.05869
650448.61	4182203.03	650448.61_4182203.03	5.81556	7.42268	0.90745	0.10977	0.67453	0.52626	5.81556	0.08343	0.05867	0.05892

649868.61	4182223.03	649868.61_4182223.03	0.91047	6.53887	0.38495	0.08455	1.48783	0.32332	0.91047	0.06447	0.0479	0.05024
649888.61	4182223.03	649888.61_4182223.03	0.94706	7.00271	0.39321	0.08525	1.46817	0.32887	0.94706	0.06499	0.04819	0.05047
649908.61	4182223.03	649908.61_4182223.03	0.98796	7.39126	0.40187	0.086	1.4169	0.33536	0.98796	0.06558	0.04852	0.05075
649928.61	4182223.03	649928.61_4182223.03	1.03134	7.76189	0.41071	0.08674	1.34246	0.34192	1.03134	0.06616	0.04885	0.05102
649948.61	4182223.03	649948.61_4182223.03	1.07754	8.11811	0.41984	0.08749	1.29771	0.34849	1.07754	0.06674	0.04918	0.05129
649968.61	4182223.03	649968.61_4182223.03	1.12697	8.45797	0.4293	0.08825	1.2562	0.35508	1.12697	0.06732	0.0495	0.05155
649988.61	4182223.03	649988.61_4182223.03	1.18007	8.76561	0.43909	0.08902	1.21659	0.3618	1.18007	0.06791	0.04983	0.05182
650008.61	4182223.03	650008.61_4182223.03	1.23715	9.04586	0.44926	0.08979	1.17934	0.36857	1.23715	0.06849	0.05016	0.05209
650028.61	4182223.03	650028.61_4182223.03	1.29861	9.29208	0.45982	0.09058	1.1436	0.37547	1.29861	0.06909	0.05049	0.05236
650048.61	4182223.03	650048.61_4182223.03	1.36518	9.49952	0.47079	0.09138	1.10867	0.38261	1.36518	0.0697	0.05083	0.05263
650068.61	4182223.03	650068.61_4182223.03	1.43717	9.6835	0.48224	0.09219	1.09185	0.38986	1.43717	0.07032	0.05118	0.05291
650088.61	4182223.03	650088.61_4182223.03	1.51538	9.83031	0.49421	0.09301	1.04316	0.3973	1.51538	0.07095	0.05154	0.0532
650108.61	4182223.03	650108.61_4182223.03	1.60015	9.9471	0.50677	0.09384	1.02763	0.40479	1.60015	0.07159	0.0519	0.05349
650128.61	4182223.03	650128.61_4182223.03	1.69222	10.02927	0.52	0.09468	0.99776	0.41237	1.69222	0.07223	0.05226	0.05378
650148.61	4182223.03	650148.61_4182223.03	1.79228	10.08191	0.53399	0.09553	0.96932	0.41997	1.79228	0.07288	0.05263	0.05408
650168.61	4182223.03	650168.61_4182223.03	1.90149	10.10267	0.54882	0.09639	0.94211	0.42766	1.90149	0.07355	0.05301	0.05438
650188.61	4182223.03	650188.61_4182223.03	2.02083	10.09808	0.56465	0.09727	0.91612	0.43536	2.02083	0.07423	0.05339	0.05468
650208.61	4182223.03	650208.61_4182223.03	2.15196	10.0571	0.58159	0.09816	0.8791	0.4432	2.15196	0.07492	0.05379	0.055
650228.61	4182223.03	650228.61_4182223.03	2.29543	9.99344	0.59976	0.09906	0.85579	0.45087	2.29543	0.07561	0.05419	0.05531
650248.61	4182223.03	650248.61_4182223.03	2.45343	9.88168	0.61931	0.09997	0.83338	0.4585	2.45343	0.07632	0.05459	0.05563
650268.61	4182223.03	650268.61_4182223.03	2.62832	9.70614	0.64035	0.10089	0.81187	0.466	2.62832	0.07704	0.055	0.05596
650288.61	4182223.03	650288.61_4182223.03	2.82256	9.4578	0.66299	0.10182	0.79145	0.47322	2.82256	0.07776	0.05542	0.05628
650308.61	4182223.03	650308.61_4182223.03	3.03959	9.13184	0.68725	0.10275	0.77217	0.48002	3.03959	0.07849	0.05584	0.05661
650328.61	4182223.03	650328.61_4182223.03	3.28396	8.72658	0.71307	0.1037	0.75367	0.48646	3.28396	0.07923	0.05626	0.05694
650348.61	4182223.03	650348.61_4182223.03	3.55856	8.29407	0.74022	0.10465	0.74515	0.4919	3.55856	0.07995	0.05667	0.05726
650368.61	4182223.03	650368.61_4182223.03	3.87265	7.82063	0.76832	0.10562	0.72768	0.49723	3.87265	0.0807	0.0571	0.0576
650388.61	4182223.03	650388.61_4182223.03	4.21831	7.40117	0.79609	0.10657	0.71149	0.50079	4.21831	0.08141	0.05751	0.0579
650408.61	4182223.03	650408.61_4182223.03	4.56707	7.03704	0.81972	0.10746	0.69653	0.5016	4.56707	0.08203	0.05786	0.05815
649868.61	4182243.03	649868.61_4182243.03	0.90383	5.67345	0.38007	0.08435	1.51864	0.31873	0.90383	0.06459	0.04784	0.05007
649888.61	4182243.03	649888.61_4182243.03	0.9404	6.00241	0.38792	0.08505	1.46619	0.32429	0.9404	0.06513	0.04814	0.05032
649908.61	4182243.03	649908.61_4182243.03	0.98141	6.28676	0.39632	0.0858	1.4131	0.33064	0.98141	0.06572	0.04848	0.0506
649928.61	4182243.03	649928.61_4182243.03	1.02567	6.51015	0.40481	0.08656	1.33303	0.33759	1.02567	0.06635	0.04884	0.05091
649948.61	4182243.03	649948.61_4182243.03	1.07142	6.77009	0.41355	0.08731	1.288	0.34388	1.07142	0.06693	0.04917	0.05118
649968.61	4182243.03	649968.61_4182243.03	1.12045	7.00887	0.42259	0.08806	1.24537	0.35027	1.12045	0.06751	0.0495	0.05144
649988.61	4182243.03	649988.61_4182243.03	1.17313	7.22207	0.43196	0.08883	1.20474	0.35679	1.17313	0.0681	0.04984	0.05171
650008.61	4182243.03	650008.61_4182243.03	1.22955	7.42245	0.44171	0.0896	1.16703	0.3633	1.22955	0.06869	0.05017	0.05198
650028.61	4182243.03	650028.61_4182243.03	1.29044	7.59251	0.45182	0.09038	1.13014	0.37004	1.29044	0.06929	0.05051	0.05225
650048.61	4182243.03	650048.61_4182243.03	1.35589	7.75147	0.46236	0.09118	1.09537	0.37683	1.35589	0.06989	0.05085	0.05253
650068.61	4182243.03	650068.61_4182243.03	1.42607	7.90278	0.47337	0.09198	1.07909	0.3836	1.42607	0.0705	0.0512	0.05281
650088.61	4182243.03	650088.61_4182243.03	1.5021	8.02841	0.48491	0.09279	1.04634	0.39053	1.5021	0.07112	0.05155	0.05309
650108.61	4182243.03	650108.61_4182243.03	1.58376	8.14093	0.49699	0.09361	1.01538	0.39741	1.58376	0.07174	0.05191	0.05337
650128.61	4182243.03	650128.61_4182243.03	1.67166	8.23238	0.50968	0.09444	0.98591	0.40429	1.67166	0.07238	0.05227	0.05365
650148.61	4182243.03	650148.61_4182243.03	1.76611	8.30676	0.52303	0.09528	0.95796	0.41107	1.76611	0.07301	0.05263	0.05394
650168.61	4182243.03	650168.61_4182243.03	1.86826	8.35947	0.53715	0.09612	0.93128	0.41782	1.86826	0.07364	0.05299	0.05422
650188.61	4182243.03	650188.61_4182243.03	1.97871	8.39012	0.55216	0.09697	0.90584	0.42448	1.97871	0.07429	0.05336	0.05451
650208.61	4182243.03	650208.61_4182243.03	2.10021	8.38617	0.56845	0.09784	0.88136	0.43125	2.10021	0.07495	0.05374	0.05481
650228.61	4182243.03	650228.61_4182243.03	2.23338	8.34595	0.58596	0.09873	0.85795	0.43794	2.23338	0.07563	0.05413	0.05512
650248.61	4182243.03	650248.61_4182243.03	2.37919	8.26087	0.60474	0.09962	0.8356	0.44443	2.37919	0.07631	0.05453	0.05543
650268.61	4182243.03	650268.61_4182243.03	2.53587	8.12773	0.62439	0.10051	0.81445	0.45031	2.53587	0.07699	0.05492	0.05573
650288.61	4182243.03	650288.61_4182243.03	2.71478	7.91954	0.64594	0.10142	0.79392	0.4564	2.71478	0.0777	0.05533	0.05605
650308.61	4182243.03	650308.61_4182243.03	2.91257	7.65207	0.66856	0.10234	0.77433	0.46201	2.91257	0.0784	0.05574	0.05637
650328.61	4182243.03	650328.61_4182243.03	3.13185	7.33584	0.692	0.10327	0.75561	0.46706	3.13185	0.07911	0.05615	0.05669
650348.61	4182243.03	650348.61_4182243.03	3.36911	6.99208	0.71527	0.10418	0.73785	0.47105	3.36911	0.07981	0.05655	0.057
650368.61	4182243.03	650368.61_4182243.03	3.63791	6.62919	0.73899	0.1051	0.72069	0.47467	3.63791	0.08051	0.05696	0.05732
649828.61	4182263.03	649828.61_4182263.03	0.83329	4.38732	0.3605	0.08281	1.59207	0.3048	0.83329	0.06375	0.04726	0.0495
649848.61	4182263.03	649848.61_4182263.03	0.86587	4.67865	0.36775	0.08351	1.53805	0.30998	0.86587	0.06428	0.04756	0.04974
649868.61	4182263.03	649868.61_4182263.03	0.90015	4.95638	0.37517	0.08421	1.51542	0.31517	0.90015	0.0648	0.04785	0.04998
649888.61	4182263.03	649888.61_4182263.03	0.93742	5.19516	0.3828	0.08492	1.45958	0.32087	0.93742	0.06536	0.04817	0.05024
649908.61	4182263.03	649908.61_4182263.03	0.97717	5.4155	0.39065	0.08565	1.4064	0.3267	0.97717	0.06592	0.0485	0.05051
649928.61	4182263.03	649928.61_4182263.03	1.02026	5.59887	0.39872	0.08639	1.32724	0.33305	1.02026	0.06653	0.04885	0.0508
649948.61	4182263.03	649948.61_4182263.03	1.06494	5.81767	0.40712	0.08713	1.30757	0.33873	1.06494	0.06707	0.04916	0.05104
649968.61	4182263.03	649968.61_4182263.03	1.10434	6.07212	0.41408	0.08775	1.26902	0.34255	1.10434	0.06748	0.04937	0.0512
649988.61	4182263.03	649988.61_4182263.03	1.15042	6.24329	0.42192	0.08846	1.2271	0.34775	1.15042	0.068	0.04967	0.05143
650008.61	4182263.03	650008.61_4182263.03	1.20307	6.38736	0.43075	0.08921	1.18585	0.35371	1.20307	0.06858	0.04999	0.05169
650028.61	4182263.03	650028.61_4182263.03	1.25989	6.50917	0.44005	0.08998	1.14656	0.35984	1.25989	0.06916	0.05033	0.05195
650048.61	4182263.03	650048.61_4182263.03	1.32189	6.62277	0.44994	0.09076	1.10911	0.36621	1.32189	0.06976	0.05068	0.05223
650068.61	4182263.03	650068.61_4182263.03	1.38856	6.72455	0.46033	0.09156	1.07361	0.37266	1.38856	0.07038	0.05103	0.05252
650088.61	4182263.03	650088.61_4182263.03	1.46045	6.81501	0.47131	0.09237	1.03994	0.3792	1.46045	0.071	0.05139	0.0528
650108.61	4182263.03	650108.61_4182263.03	1.5377	6.89078	0.4829	0.0932	1.00804	0.38575	1.5377	0.07163	0.05176	0.05309
649828.61	4182283.03	649828.61_4182283.03	0.82991	3.92099	0.35564	0.08266	1.58438	0.30172	0.82991	0.06398	0.04731	0.04944
649848.61	4182283.03	649848.61_4182283.03	0.86233	4.17572	0.36277	0.08336	1.53803	0.30634	0.86233	0.06447	0.04758	0.04965
649868.61	4182283.03	649868.61_4182283.03	0.89663	4.39311	0.36989	0.08406	1.51458	0.31141	0.89663	0.06499	0.04787	0.04989
649888.61	4182283.03	649888.61_4182283.03	0.93362	4.57887	0.37719	0.08477	1.45649	0.31692	0.93362	0.06555	0.0482	0.05015
649908.61	4182283.03	649908.61_4182283.03	0.97294	4.7501	0.38471	0.0855	1.40147	0.32251	0.97294	0.06611	0.04852	0.05042
649928.61	4182283.03	649928.61_4182283.03	1.01504	4.90544	0.39248	0.08623	1.34872	0.32832	1.01504	0.06668	0.04885	0.05069
649948.61	4182283.03	649948.61_4182283.03	1.05017	5.11105	0.39863	0.08683	1.30759	0.33165	1.05017	0.06706	0.04906	0.05083
649968.61	4182283.03	649968.61_4182283.03	1.08816	5.21159	0.40499	0.08747	1.26332	0.33576	1.08816	0.06751	0.04931	0.05101
649828.61	4182303.03	649828.61_4182303.03	0.82658	3.37542	0.35037	0.08249	1.56753	0.29883	0.82658	0.06415	0.04738	0.0494
649848.61	4182303.03	649848.61_4182303.03	0.85944	3.76651	0.35761	0.08323	1.54282	0.30259	0.85944	0.06464	0.0476	0.04956
649868.61	4182303.03	649868.61_4182303.03	0.89387	3.93142	0.36443	0.08393	1.48344	0.30773	0.89387	0.06518	0.04792	0.04982
649888.61	4182303.03	649888.61_4182303.03	0.93041	4.08106	0.37144	0.08465	1.42606	0.313	0.93041	0.06573	0.04824	0.05008
649908.61	4182303.03	649908.61_4182303.03	0.96948	4.21205	0.37866	0.08537	1.36969	0.31851	0.96948	0.0663	0.04857	0.05035
649928.61	4182303.03	649928.61_4182303.03	1.01087	4.33527	0.38613	0.0861	1.34152	0.32405	1.01087	0.06686	0.0489	0.05061
649948.61	4182303.03	649948.61_4182303.03	1.04607	4.49481	0.39217	0.08671	1.29838	0.32737	1.04607	0.06725	0.04911	0.05076
649968.61	4182303.03	649968.61_4182303.03	1.08299	4.57562	0.39822	0.08735	1.25291	0.33124	1.08299	0.0677	0.04937	0.05095
649848.61	4182323.03	649848.61_4182323.03	0.857	3.42206	0.35233	0.08312	1.54925	0.29884	0.857	0.06482	0.04764	0.04949
649868.61	4182323.03	649868.61_4182323.03	0.89125	3.54895	0.35886	0.08383	1.48284	0.30401	0.89125	0.06537	0.04797	0.04976
649888.61	4182323.03	649888.61_4182323.03	0.92718	3.67184	0.36561	0.08454	1.45138	0.30905	0.92718	0.06591	0.04829	0.05001
649908.61	4182323.03	649908.61_4182323.03	0.96568	3.77622	0.37257	0.08526	1.39067	0.3144	0.96568	0.06648	0.04863	0.05028
649928.61	4182323.03	649928.61_4182323.03	1.00666	3.86879	0.37979	0.086	1.30856	0.31991	1.00666	0.06706	0.04897	0.05056
649948.61	4182323.03	649948.61_4182323.03	1.0422	3.99582	0.38591	0.08663	1.28796	0.32332	1.0422	0.06745	0.0492	0.05072
649848.61	4182343.03	649848.61_4182343.03	0.85509	3.11052	0.34685	0.08304	1.54297	0.29576	0.85509	0.06504	0.04774	0.04947
649868.61	4182343.03	649868.61_4182343.03	0.88839	3.22753	0.35327	0.08374	1.4834	0.30028	0.88839	0.06554	0.04804	0.04971
649888.61	4182343.03	649888.61_4182343.03	0.92382	3.32479	0.35978	0.08446	1.41955	0.30528	0.92382	0.06609	0.04837	0.04997
649908.61	4182343.03	649908.61_4182343.03	0.96141	3.40976	0.36653	0.08518	1.38394	0.31045	0.96141	0.06665	0.04871	0.05025
649928.61	4182343.03	649928.61_4182343.03	1.00134	3.48377	0.37355	0.08593	1.29921	0.3158	1.00134	0.06723	0.04906	0.05053
649948.61	4182343.03	649948.61_4182343.03	1.04013	3.57602	0.38046	0.08662	1.27362	0.32011	1.04013	0.06772	0.04935	0.05075
649848.61	4182363.03	649848.61_4182363.03	0.85203	2.80548	0.34121	0.08297	1.52808	0.29287	0.85203	0.06526	0.04787	0.04949
649868.61	4182363.03	649868.61_4182363.03	0.88494	2.94672	0.34768	0.08369	1.4785	0.29684	0.88494	0.06573	0.04814	0.04969
649888.61	4182363.03	649888.61_4182363.03	0.91927	3.02986	0.35404	0.0844	1.4137	0.30156	0.91927	0.06627	0.04847	0.04995

649908.61	4182363.03	649908.61_4182363.03	0.95566	3.1005	0.36062	0.08513	1.37583	0.30654	0.95566	0.06682	0.04881	0.05023
649928.61	4182363.03	649928.61_4182363.03	0.99422	3.16138	0.36749	0.08588	1.28893	0.31172	0.99422	0.0674	0.04916	0.05051
649948.61	4182363.03	649948.61_4182363.03	1.03416	3.22324	0.37468	0.08662	1.25798	0.31667	1.03416	0.06796	0.0495	0.05079
649868.61	4182383.03	649868.61_4182383.03	0.87955	2.71207	0.34225	0.08365	1.47883	0.29306	0.87955	0.06587	0.04823	0.04966
649888.61	4182383.03	649888.61_4182383.03	0.91311	2.77589	0.34844	0.08438	1.40503	0.29794	0.91311	0.06643	0.04858	0.04995
649908.61	4182383.03	649908.61_4182383.03	0.94811	2.8348	0.35491	0.08511	1.33843	0.30277	0.94811	0.06699	0.04892	0.05023
649928.61	4182383.03	649928.61_4182383.03	0.98473	2.88808	0.3617	0.08585	1.3019	0.30765	0.98473	0.06755	0.04927	0.05051
649948.61	4182383.03	649948.61_4182383.03	1.02317	2.93624	0.36882	0.0866	1.24359	0.3126	1.02317	0.06812	0.04963	0.0508
649968.61	4182383.03	649968.61_4182383.03	1.05237	3.00538	0.37426	0.08718	1.19937	0.31481	1.05237	0.06845	0.04982	0.05093
649868.61	4182403.03	649868.61_4182403.03	0.8728	2.50168	0.33695	0.08365	1.46988	0.28967	0.8728	0.06604	0.04835	0.04968
649888.61	4182403.03	649888.61_4182403.03	0.90483	2.55624	0.34306	0.08438	1.39343	0.29434	0.90483	0.06659	0.0487	0.04996
649908.61	4182403.03	649908.61_4182403.03	0.938	2.60795	0.34947	0.08511	1.3527	0.29894	0.938	0.06713	0.04904	0.05024
649928.61	4182403.03	649928.61_4182403.03	0.97284	2.65272	0.3562	0.08585	1.28747	0.30367	0.97284	0.0677	0.0494	0.05053
649948.61	4182403.03	649948.61_4182403.03	1.00924	2.69322	0.3633	0.0866	1.22791	0.30845	1.00924	0.06826	0.04976	0.05082
649968.61	4182403.03	649968.61_4182403.03	1.04193	2.74818	0.36987	0.08726	1.17969	0.31167	1.04193	0.06869	0.05003	0.05102
649868.61	4182423.03	649868.61_4182423.03	0.86395	2.31664	0.33187	0.08367	1.45554	0.28638	0.86395	0.06619	0.04849	0.04971
649888.61	4182423.03	649888.61_4182423.03	0.89416	2.36635	0.33795	0.08439	1.38009	0.29072	0.89416	0.06672	0.04883	0.04998
649908.61	4182423.03	649908.61_4182423.03	0.92552	2.41111	0.34432	0.08512	1.33739	0.29514	0.92552	0.06726	0.04917	0.05027
649928.61	4182423.03	649928.61_4182423.03	0.95837	2.44969	0.35104	0.08586	1.27085	0.29968	0.95837	0.06782	0.04953	0.05056
649948.61	4182423.03	649948.61_4182423.03	0.99283	2.48311	0.35815	0.08661	1.21	0.30434	0.99283	0.06839	0.0499	0.05086
649968.61	4182423.03	649968.61_4182423.03	1.02682	2.52303	0.36546	0.08733	1.15818	0.30826	1.02682	0.0689	0.05023	0.05112
649868.61	4182443.03	649868.61_4182443.03	0.85297	2.15544	0.32706	0.08371	1.43866	0.28302	0.85297	0.06633	0.04863	0.04975
649888.61	4182443.03	649888.61_4182443.03	0.88146	2.19896	0.33313	0.08442	1.36183	0.28719	0.88146	0.06685	0.04897	0.05003
649908.61	4182443.03	649908.61_4182443.03	0.91109	2.23732	0.33951	0.08515	1.31791	0.29147	0.91109	0.06739	0.04932	0.05031
649928.61	4182443.03	649928.61_4182443.03	0.94203	2.27045	0.34625	0.08589	1.25053	0.29586	0.94203	0.06794	0.04969	0.05061
649948.61	4182443.03	649948.61_4182443.03	0.9743	2.29973	0.35337	0.08664	1.16633	0.30025	0.9743	0.06851	0.05006	0.05092
649968.61	4182443.03	649968.61_4182443.03	1.00753	2.32864	0.3609	0.08738	1.13585	0.30442	1.00753	0.06905	0.05041	0.05121
649868.61	4182463.03	649868.61_4182463.03	0.83991	2.01556	0.32258	0.08374	1.42164	0.27947	0.83991	0.06641	0.04876	0.04979
649888.61	4182463.03	649888.61_4182463.03	0.86693	2.05079	0.32864	0.08447	1.33862	0.2837	0.86693	0.06696	0.04912	0.05009
649908.61	4182463.03	649908.61_4182463.03	0.89485	2.08388	0.33504	0.08519	1.26695	0.28785	0.89485	0.06749	0.04947	0.05038
649928.61	4182463.03	649928.61_4182463.03	0.92395	2.1126	0.3418	0.08592	1.20168	0.29204	0.92395	0.06805	0.04984	0.05068
649948.61	4182463.03	649948.61_4182463.03	0.9543	2.13707	0.34894	0.08666	1.14226	0.29626	0.9543	0.06861	0.05022	0.05099
649968.61	4182463.03	649968.61_4182463.03	0.9858	2.16036	0.35651	0.0874	1.09073	0.30028	0.9858	0.06916	0.05059	0.0513
649868.61	4182483.03	649868.61_4182483.03	0.82526	1.88919	0.31838	0.08378	1.42919	0.27607	0.82526	0.0665	0.0489	0.04985
649888.61	4182483.03	649888.61_4182483.03	0.85079	1.91985	0.32446	0.08451	1.31236	0.28017	0.85079	0.06704	0.04927	0.05015
649908.61	4182483.03	649908.61_4182483.03	0.87712	1.94807	0.33089	0.08522	1.23988	0.28418	0.87712	0.06758	0.04963	0.05046
649928.61	4182483.03	649928.61_4182483.03	0.90451	1.97285	0.33768	0.08595	1.1754	0.28817	0.90451	0.06813	0.05	0.05076
649948.61	4182483.03	649948.61_4182483.03	0.93307	1.99439	0.34484	0.08668	1.11797	0.2921	0.93307	0.06868	0.05037	0.05107
649968.61	4182483.03	649968.61_4182483.03	0.96277	2.01394	0.35238	0.08741	1.08896	0.29585	0.96277	0.06922	0.05074	0.05137
649848.61	4182503.03	649848.61_4182503.03	0.78683	1.74119	0.30861	0.08314	1.44456	0.26927	0.78683	0.0661	0.04874	0.04967
649868.61	4182503.03	649868.61_4182503.03	0.80962	1.77501	0.31447	0.08383	1.39595	0.27277	0.80962	0.06658	0.04906	0.04993
649888.61	4182503.03	649888.61_4182503.03	0.83348	1.80265	0.32059	0.08454	1.31179	0.27661	0.83348	0.06711	0.04942	0.05023
649908.61	4182503.03	649908.61_4182503.03	0.85831	1.82704	0.32705	0.08525	1.21014	0.28045	0.85831	0.06764	0.04979	0.05054
649928.61	4182503.03	649928.61_4182503.03	0.88428	1.84779	0.33385	0.08597	1.14636	0.28428	0.88428	0.06819	0.05016	0.05085
649948.61	4182503.03	649948.61_4182503.03	0.91109	1.8673	0.341	0.08668	1.11499	0.28782	0.91109	0.06871	0.05052	0.05115
649968.61	4182503.03	649968.61_4182503.03	0.93916	1.88369	0.34845	0.08738	1.06391	0.29125	0.93916	0.06924	0.05088	0.05145
649988.61	4182503.03	649988.61_4182503.03	0.95792	1.89941	0.35375	0.08786	1.02537	0.2918	0.95792	0.06948	0.05103	0.05155
649848.61	4182523.03	649848.61_4182523.03	0.77117	1.64612	0.30502	0.08317	1.45196	0.26572	0.77117	0.06611	0.04885	0.04972
649868.61	4182523.03	649868.61_4182523.03	0.79299	1.67206	0.31085	0.08386	1.32232	0.26946	0.79299	0.06664	0.04922	0.05002
649888.61	4182523.03	649888.61_4182523.03	0.81544	1.69683	0.31699	0.08455	1.27559	0.27305	0.81544	0.06715	0.04957	0.05032
649908.61	4182523.03	649908.61_4182523.03	0.83911	1.71729	0.32347	0.08526	1.17576	0.27675	0.83911	0.06769	0.04995	0.05063
649928.61	4182523.03	649928.61_4182523.03	0.86376	1.73514	0.33026	0.08596	1.11491	0.28033	0.86376	0.06822	0.05032	0.05095
649948.61	4182523.03	649948.61_4182523.03	0.88942	1.75092	0.33737	0.08666	1.08483	0.28368	0.88942	0.06874	0.05068	0.05125
649968.61	4182523.03	649968.61_4182523.03	0.9146	1.76736	0.34437	0.0873	1.03825	0.28626	0.9146	0.06919	0.05098	0.0515
649828.61	4182543.03	649828.61_4182543.03	0.73546	1.53056	0.29606	0.08252	1.5074	0.25905	0.73546	0.06565	0.04866	0.04952
649848.61	4182543.03	649848.61_4182543.03	0.75524	1.55591	0.30163	0.08319	1.40204	0.26256	0.75524	0.06615	0.04901	0.04981
649868.61	4182543.03	649868.61_4182543.03	0.77588	1.57887	0.30748	0.08388	1.31155	0.26611	0.77588	0.06667	0.04937	0.05012
649888.61	4182543.03	649888.61_4182543.03	0.79731	1.59964	0.31366	0.08456	1.23344	0.26959	0.79731	0.06719	0.04973	0.05043
649908.61	4182543.03	649908.61_4182543.03	0.8198	1.61755	0.32012	0.08525	1.16513	0.27303	0.8198	0.06771	0.0501	0.05074
649928.61	4182543.03	649928.61_4182543.03	0.84332	1.63295	0.32687	0.08593	1.10542	0.27632	0.84332	0.06823	0.05046	0.05105
649948.61	4182543.03	649948.61_4182543.03	0.86719	1.64788	0.33375	0.08658	1.0546	0.27908	0.86719	0.0687	0.05079	0.05132
649888.61	4182563.03	649888.61_4182563.03	0.77921	1.51095	0.31051	0.08454	1.15679	0.26609	0.77921	0.06721	0.04989	0.05054
649908.61	4182563.03	649908.61_4182563.03	0.80081	1.52624	0.31693	0.08521	1.1234	0.26929	0.80081	0.06772	0.05025	0.05085
649928.61	4182563.03	649928.61_4182563.03	0.82319	1.5403	0.32357	0.08586	1.06882	0.27214	0.82319	0.0682	0.05059	0.05114
649948.61	4182563.03	649948.61_4182563.03	0.84031	1.55359	0.32866	0.08632	1.0267	0.27296	0.84031	0.06847	0.05077	0.05128
649748.61	4182643.03	649748.61_4182643.03	0.59921	1.0666	0.25794	0.07984	1.19218	0.2335	0.59921	0.06374	0.04811	0.04909
649864.97	4182563.55	649864.97_4182563.55	0.75457	1.48758	0.30319	0.08375	1.23833	0.26211	0.75457	0.0666	0.04947	0.05018
649848.56	4182565.38	649848.56_4182565.38	0.73705	1.4638	0.2981	0.0832	1.2988	0.25907	0.73705	0.06619	0.04919	0.04994
648281.36	4184789.59	648281.36_4184789.59	0.09481	0.10121	0.06861	0.03964	0.08815	0.06307	0.09481	0.03343	0.02913	0.03277
648281.36	4184809.59	648281.36_4184809.59	0.09421	0.10011	0.06825	0.03957	0.08703	0.06267	0.09421	0.03332	0.02907	0.03274
655583.55	4180801.9	655583.55_4180801.9	0.09544	0.0858	0.12359	12.86229	0.06379	0.1193	0.09544	0.57635	1.74336	122.60146
655603.55	4180801.9	655603.55_4180801.9	0.09484	0.0853	0.12265	12.15601	0.06349	0.11841	0.09484	0.56469	1.67853	77.75105
655623.55	4180801.9	655623.55_4180801.9	0.09426	0.08481	0.12172	11.64469	0.06319	0.11752	0.09426	0.5534	1.61726	54.64655
655583.55	4180821.9	655583.55_4180821.9	0.0955	0.08584	0.12345	10.48818	0.06381	0.11907	0.0955	0.57637	1.75784	123.41091
655603.55	4180821.9	655603.55_4180821.9	0.0949	0.08534	0.12251	9.52865	0.06351	0.11818	0.0949	0.56468	1.69157	79.05871
655623.55	4180821.9	655623.55_4180821.9	0.09431	0.08484	0.12158	8.8297	0.06321	0.11729	0.09431	0.55336	1.62896	56.08621
655583.55	4180841.9	655583.55_4180841.9	0.09558	0.08587	0.12329	9.56036	0.06382	0.11884	0.09558	0.57617	1.7701	122.90228
655603.55	4180841.9	655603.55_4180841.9	0.09498	0.08537	0.12235	8.39018	0.06352	0.11794	0.09498	0.56448	1.70256	79.37949
655623.55	4180841.9	655623.55_4180841.9	0.09438	0.08488	0.12143	7.55692	0.06323	0.11706	0.09438	0.55317	1.63893	56.77867
655643.55	4180841.9	655643.55_4180841.9	0.09381	0.0844	0.12053	6.9611	0.06294	0.1162	0.09381	0.54225	1.57906	43.58787
655663.55	4180841.9	655663.55_4180841.9	0.09325	0.08392	0.11963	6.52624	0.06265	0.11534	0.09325	0.53169	1.52248	35.06517
655583.55	4180861.9	655583.55_4180861.9	0.09563	0.08591	0.12312	9.00972	0.06383	0.11859	0.09563	0.57577	1.78013	121.64361
655603.55	4180861.9	655603.55_4180861.9	0.09505	0.08542	0.12219	7.6736	0.06354	0.11771	0.09505	0.56409	1.71162	79.21209
655623.55	4180861.9	655623.55_4180861.9	0.09448	0.08493	0.12128	6.76321	0.06324	0.11683	0.09448	0.5528	1.64716	57.10065
655643.55	4180861.9	655643.55_4180861.9	0.0939	0.08446	0.12037	6.1259	0.06295	0.11597	0.0939	0.54188	1.58636	44.02606
655663.55	4180861.9	655663.55_4180861.9	0.09333	0.08398	0.11948	5.66743	0.06267	0.11511	0.09333	0.5313	1.52895	35.52843
655583.55	4180881.9	655583.55_4180881.9	0.09572	0.08597	0.12295	8.45462	0.06385	0.11835	0.09572	0.57521	1.78828	120.34127
655603.55	4180881.9	655603.55_4180881.9	0.09513	0.08548	0.12203	7.04026	0.06355	0.11747	0.09513	0.56354	1.71881	78.88577
655623.55	4180881.9	655623.55_4180881.9	0.09454	0.085	0.12111	6.12222	0.06326	0.11659	0.09454	0.55224	1.65342	57.14592
655643.55	4180881.9	655643.55_4180881.9	0.09397	0.08452	0.12021	5.49468	0.06297	0.11573	0.09397	0.54131	1.59183	44.24309
655663.55	4180881.9	655663.55_4180881.9	0.0934	0.08404	0.11931	5.04616	0.06268	0.11488	0.0934	0.53073	1.53368	35.79604
656281.39	4180822.75	656281.39_4180822.75	0.07821	0.07124	0.09679	5.17881	0.05475	0.0935	0.07821	0.31908	0.64004	2.92587
656298.45	4180812.4	656298.45_4180812.4	0.07781	0.07091	0.09633	5.93294	0.05455	0.09309	0.07781	0.31543	0.62816	2.80963
656210.13	4181007.91	656210.13_4181007.91	0.08067	0.07329	0.09759	1.25718	0.05549	0.09391	0.08067	0.3292	0.68331	3.38591
656225.97	4181073.08	656225.97_4181073.08	0.08073	0.07329	0.09648	0.99675	0.05519	0.09278	0.08073	0.32173	0.66146	3.09732
656180.29	4181060.9	656180.29_4181060.9	0.08165	0.07409	0.09807	1.1012	0.05576	0.09429	0.08165	0.33352	0.69977	3.50758

B-4 Construction HRA

Mossdale Construction HRA - Part 1

Cancer Risk and Hazard Index - Offsite Residential - Uncontrolled

						Exposure Duration (Days)				DPM	
					Start Date	1/2/2026	4/3/2026	4/3/2028			
					Stop Date	4/2/2026	4/2/2028			Emisions (tons)	Emission Rate (g/s)
Source		Year	Start Date	End Date	Calendar Days	3rd Trimester	0<2	2<9	Exposure Duration	Uncontrolled	Uncontrolled
ID 1	ARLN11	2026	7/3/2026	10/2/2026	91	0	91	0	91	0.02	0.003
ID 2	ARLN12	2027	8/1/2027	10/18/2027	78	0	78	0	78	0.02	0.004
ID 3	ARLN13	2026	1/2/2026	6/20/2026	169	90	78	1	169	0.09	0.009
ID 4	PAREA1	2026	7/19/2026	8/21/2026	33	0	33	0	33	0.17	0.087
ID 5	ARLN14	2026	9/19/2026	12/20/2026	92	0	92	0	92	0.04	0.008
ID 6	ARLN15	2029	8/3/2029	12/14/2029	133	0	0	133	133	0.04	0.005
ID 6	ARLN15	2030	7/20/2030	9/23/2030	65	0	0	65	65	0.00	0.001
AR1	ARLN1	2026	7/3/2026	10/2/2026	91	0	91	0	91	0.00	0.000
AR1	ARLN1	2027	8/1/2027	10/20/2027	80	0	80	0	80	0.00	0.000
										0.39	

Cancer Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	2<9	
Daily Breathing Rate	DBR	L/kg-day	361	1090	631	
Fraction Of Time At Home	FAH	unitless	1	1	1	Conservatively assume risk at nearby schools >1
Exposure Frequency	EF	days/year	0.96	0.96	0.96	
Age Sensitivity Factor	ASF	unitless	10	10	3	
Inhalation Absorption Factor	A	unitless	1	1	1	
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001	
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001	
Cancer Potency Factor (diesel exhaust)	CPF	mg/kg-day^{-1}	1.1	1.1	1.1	
Averaging Time (for residential exposure)	AT	years	70.00	70.00	70.00	

SOURCE: Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments* . February 2015

Daily breathing rate for residential receptor is based on the OEHHA 95th percentile moderate intensity breathing rates (OEHHA Table 5.7).

Fraction of time at home is set to values per OEHHA Table 8.4 for residential since the nearest school has an unmitigated cancer risk of <1 per million.

Inhalation cancer potency factor from OEHHA Table 7.1

Hazard Index

Chronic Inhalation	REL	$\mu g/m^3$	5

Intake Factor for Inhalation, IF (m^3/kg-day) = DBR*FAH*EF*ED*ASF*A*CF/AT

Source	3rd Trimester	0<2	2<9
ID 1	0.000	0.037	0.000
ID 2	0.000	0.032	0.000
ID 3	0.012	0.032	0.000
ID 4	0.000	0.013	0.000
ID 5	0.000	0.038	0.000
ID 6	0.000	0.000	0.009
ID 6	0.000	0.000	0.005
AR1	0.000	0.037	0.000
AR1	0.000	0.033	0.000

Risk Calculation Part 1, R1 = IF*CPF*CF

3rd Trimester	0<2	2<9
0.00E+00	4.09E-05	0.00E+00
0.00E+00	3.51E-05	0.00E+00
1.34E-05	3.51E-05	7.81E-08
0.00E+00	1.48E-05	0.00E+00
0.00E+00	4.14E-05	0.00E+00
0.00E+00	0.00E+00	1.04E-05
0.00E+00	0.00E+00	5.08E-06
0.00E+00	4.09E-05	0.00E+00
0.00E+00	3.60E-05	0.00E+00

	Cancer Risk	UTM X	UTM Y
MAX UNCONTROLLED	16.28	646628.7	4193389.31

HI	UTM X	UTM Y
0.21	646628.7	4193389.31

Diesel Particulate Matter concentration, C_{DPM} ($\mu g/m^3$)

X (UTM)	Y (UTM)	Project Construction								
		ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 6	AR1	AR1
		2026	2027	2026	2026	2026	2029	2030	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9
647190.61	4195739.7	0.001	0.116	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647210.61	4195739.7	0.001	0.096	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647230.61	4195739.7	0.001	0.080	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647250.61	4195739.7	0.001	0.067	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647270.61	4195739.7	0.001	0.057	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647290.61	4195739.7	0.001	0.049	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647310.61	4195739.7	0.001	0.043	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647330.61	4195739.7	0.001	0.037	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647350.61	4195739.7	0.001	0.033	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647370.61	4195739.7	0.001	0.029	0.004	0.008	0.001	0.000	0.000	0.002	0.001
647390.61	4195739.7	0.001	0.026	0.004	0.007	0.001	0.000	0.000	0.003	0.001
647410.61	4195739.7	0.001	0.024	0.004	0.007	0.001	0.000	0.000	0.003	0.001
647430.61	4195739.7	0.001	0.022	0.004	0.007	0.001	0.000	0.000	0.003	0.001
647450.61	4195739.7	0.001	0.020	0.004	0.007	0.001	0.000	0.000	0.003	0.001
647190.61	4195759.7	0.001	0.122	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647210.61	4195759.7	0.001	0.099	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647230.61	4195759.7	0.001	0.082	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647250.61	4195759.7	0.001	0.068	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647270.61	4195759.7	0.001	0.057	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647290.61	4195759.7	0.001	0.048	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647310.61	4195759.7	0.001	0.042	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647330.61	4195759.7	0.001	0.036	0.004	0.008	0.001	0.000	0.000	0.001	0.001
647350.61	4195759.7	0.001	0.032	0.004	0.007	0.001	0.000	0.000	0.001	0.001
647370.61	4195759.7	0.001	0.028	0.004	0.007	0.001	0.000	0.000	0.001	0.001
647390.61	4195759.7	0.001	0.025	0.004	0.007	0.001	0.000	0.000	0.001	0.001
647410.61	4195759.7	0.001	0.023	0.004	0.007	0.001	0.000	0.000	0.001	0.001
647430.61	4195759.7	0.001	0.021	0.004	0.007	0.001	0.000	0.000	0.001	0.001
647450.61	4195759.7	0.001	0.019	0.004	0.007	0.000	0.000	0.000	0.001	0.001
647470.61	4195759.7	0.001	0.017	0.004	0.007	0.000	0.000	0.000	0.001	0.001
647490.61	4195759.7	0.001	0.016	0.004	0.007	0.000	0.000	0.000	0.001	0.001
647510.61	4195759.7	0.001	0.015	0.003	0.007	0.000	0.000	0.000	0.001	0.001
647530.61	4195759.7	0.001	0.014	0.003	0.007	0.000	0.000	0.000	0.001	0.001
647550.61	4195759.7	0.001	0.013	0.003	0.007	0.000	0.000	0.000	0.001	0.001
647570.61	4195759.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.001	0.001
647590.61	4195759.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.001	0.001
647610.61	4195759.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.001	0.001
647630.61	4195759.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.001	0.001
647650.61	4195759.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.001	0.000
647190.61	4195779.7	0.001	0.127	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647210.61	4195779.7	0.001	0.103	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647230.61	4195779.7	0.001	0.082	0.004	0.008	0.001	0.000	0.000	0.001	0.000
647250.61	4195779.7	0.001	0.067	0.003	0.008	0.001	0.000	0.000	0.001	0.000
647270.61	4195779.7	0.001	0.055	0.003	0.008	0.001	0.000	0.000	0.001	0.000

Risk Calculation Part 2

Cancer Risk = $\sum$R1*C_{DPM}				HI
3rd Trimester	0<2	2<9	Total	C_{DPM}/REL
				unitless
Source: All				
5.28E-08	4.51E-06	2.54E-09	4.566309	0.023
5.21E-08	3.81E-06	2.53E-09	3.8621	0.019
5.15E-08	3.25E-06	2.52E-09	3.305512	0.016
5.11E-08	2.81E-06	2.51E-09	2.866637	0.014
5.08E-08	2.46E-06	2.51E-09	2.515601	0.012
5.06E-08	2.18E-06	2.51E-09	2.235496	0.010
5.04E-08	1.95E-06	2.52E-09	2.006911	0.009
5.03E-08	1.77E-06	2.53E-09	1.82137	0.008
5.02E-08	1.62E-06	2.53E-09	1.66916	0.007
5.01E-08	1.49E-06	2.54E-09	1.543677	0.006
5.00E-08	1.39E-06	2.55E-09	1.439268	0.006
4.99E-08	1.30E-06	2.57E-09	1.352401	0.005
4.97E-08	1.23E-06	2.58E-09	1.279911	0.005
4.95E-08	1.17E-06	2.59E-09	1.218126	0.004
5.05E-08	4.64E-06	2.51E-09	4.695978	0.024
4.98E-08	3.86E-06	2.49E-09	3.914295	0.020
4.92E-08	3.24E-06	2.48E-09	3.292106	0.016
4.88E-08	2.75E-06	2.48E-09	2.805106	0.014
4.85E-08	2.37E-06	2.48E-09	2.422853	0.011
4.83E-08	2.07E-06	2.48E-09	2.121323	0.010
4.81E-08	1.83E-06	2.49E-09	1.883319	0.008
4.80E-08	1.64E-06	2.49E-09	1.693298	0.007
4.79E-08	1.49E-06	2.50E-09	1.540291	0.006
4.79E-08	1.37E-06	2.51E-09	1.415557	0.006
4.78E-08	1.26E-06	2.52E-09	1.31279	0.005
4.77E-08	1.18E-06	2.54E-09	1.226944	0.005
4.76E-08	1.10E-06	2.55E-09	1.154759	0.004
4.75E-08	1.04E-06	2.56E-09	1.093257	0.004
4.73E-08	9.90E-07	2.57E-09	1.039896	0.004
4.70E-08	9.44E-07	2.58E-09	0.993423	0.003
4.68E-08	9.03E-07	2.60E-09	0.95243	0.003
4.64E-08	8.67E-07	2.61E-09	0.916095	0.003
4.61E-08	8.35E-07	2.62E-09	0.883691	0.003
4.56E-08	8.05E-07	2.64E-09	0.853614	0.003
4.52E-08	7.79E-07	2.65E-09	0.826464	0.003
4.47E-08	7.54E-07	2.67E-09	0.801393	0.003
4.43E-08	7.31E-07	2.68E-09	0.777885	0.003
4.38E-08	7.08E-07	2.70E-09	0.75426	0.003
4.84E-08	4.82E-06	2.47E-09	4.871135	0.026
4.77E-08	3.95E-06	2.46E-09	4.000051	0.021
4.70E-08	3.23E-06	2.45E-09	3.281759	0.017
4.66E-08	2.70E-06	2.45E-09	2.748947	0.013
4.63E-08	2.29E-06	2.45E-09	2.34136	0.011

647290.61	4195779.7	0.001	0.047	0.003	0.008	0.001	0.000	0.000	0.001	0.000	4.61E-08	1.98E-06	2.45E-09	2.030065	0.009
647310.61	4195779.7	0.001	0.040	0.003	0.007	0.001	0.000	0.000	0.001	0.000	4.60E-08	1.74E-06	2.46E-09	1.786777	0.008
647330.61	4195779.7	0.001	0.034	0.003	0.007	0.001	0.000	0.000	0.001	0.000	4.59E-08	1.55E-06	2.47E-09	1.600147	0.007
647350.61	4195779.7	0.001	0.030	0.003	0.007	0.001	0.000	0.000	0.001	0.000	4.59E-08	1.40E-06	2.48E-09	1.452376	0.006
647370.61	4195779.7	0.001	0.027	0.003	0.007	0.001	0.000	0.000	0.001	0.000	4.58E-08	1.29E-06	2.49E-09	1.333482	0.005
647390.61	4195779.7	0.001	0.024	0.003	0.007	0.001	0.000	0.000	0.001	0.000	4.58E-08	1.19E-06	2.50E-09	1.236609	0.005
647410.61	4195779.7	0.001	0.022	0.003	0.007	0.001	0.000	0.000	0.001	0.000	4.57E-08	1.11E-06	2.51E-09	1.155908	0.004
647430.61	4195779.7	0.001	0.020	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.57E-08	1.04E-06	2.52E-09	1.088119	0.004
647450.61	4195779.7	0.001	0.018	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.56E-08	9.82E-07	2.53E-09	1.030214	0.004
647470.61	4195779.7	0.001	0.017	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.54E-08	9.32E-07	2.54E-09	0.980238	0.003
647490.61	4195779.7	0.001	0.015	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.52E-08	8.89E-07	2.56E-09	0.936639	0.003
647510.61	4195779.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.50E-08	8.51E-07	2.57E-09	0.898124	0.003
647530.61	4195779.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.47E-08	8.17E-07	2.58E-09	0.863932	0.003
647550.61	4195779.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.44E-08	7.86E-07	2.60E-09	0.833373	0.003
647570.61	4195779.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.40E-08	7.58E-07	2.61E-09	0.804996	0.003
647590.61	4195779.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.36E-08	7.32E-07	2.63E-09	0.778709	0.003
647610.61	4195779.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.32E-08	7.09E-07	2.64E-09	0.755041	0.003
647630.61	4195779.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.28E-08	6.88E-07	2.66E-09	0.733288	0.003
647650.61	4195779.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.24E-08	6.66E-07	2.67E-09	0.71134	0.003
647190.61	4195799.7	0.001	0.131	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.64E-08	4.93E-06	2.44E-09	4.975765	0.026
647210.61	4195799.7	0.001	0.104	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.57E-08	3.99E-06	2.43E-09	4.033489	0.021
647230.61	4195799.7	0.001	0.081	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.51E-08	3.17E-06	2.42E-09	3.212495	0.016
647250.61	4195799.7	0.001	0.064	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.46E-08	2.59E-06	2.42E-09	2.63805	0.013
647270.61	4195799.7	0.001	0.052	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.44E-08	2.17E-06	2.42E-09	2.217343	0.011
647290.61	4195799.7	0.001	0.044	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.42E-08	1.87E-06	2.42E-09	1.912367	0.009
647310.61	4195799.7	0.001	0.037	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.40E-08	1.63E-06	2.43E-09	1.67354	0.007
647330.61	4195799.7	0.001	0.032	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.39E-08	1.45E-06	2.44E-09	1.498145	0.006
647350.61	4195799.7	0.001	0.028	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.39E-08	1.31E-06	2.45E-09	1.361145	0.006
647370.61	4195799.7	0.001	0.025	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.38E-08	1.21E-06	2.46E-09	1.252623	0.005
647390.61	4195799.7	0.001	0.022	0.003	0.007	0.001	0.000	0.000	0.001	0.000	4.38E-08	1.12E-06	2.47E-09	1.163947	0.005
647410.61	4195799.7	0.001	0.020	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.38E-08	1.04E-06	2.48E-09	1.09009	0.004
647430.61	4195799.7	0.001	0.019	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.38E-08	9.82E-07	2.49E-09	1.027886	0.004
647450.61	4195799.7	0.002	0.017	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.37E-08	9.29E-07	2.50E-09	0.975035	0.003
647470.61	4195799.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.36E-08	8.83E-07	2.52E-09	0.929132	0.003
647490.61	4195799.7	0.002	0.015	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.35E-08	8.43E-07	2.53E-09	0.889112	0.003
647510.61	4195799.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.33E-08	8.08E-07	2.54E-09	0.853606	0.003
647530.61	4195799.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.31E-08	7.77E-07	2.56E-09	0.822315	0.003
647550.61	4195799.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.28E-08	7.50E-07	2.57E-09	0.794985	0.003
647570.61	4195799.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.001	0.000	4.25E-08	7.24E-07	2.59E-09	0.76885	0.003
647590.61	4195799.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.22E-08	7.00E-07	2.60E-09	0.7448	0.003
647610.61	4195799.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.18E-08	6.78E-07	2.62E-09	0.722876	0.003
647630.61	4195799.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.14E-08	6.59E-07	2.63E-09	0.703158	0.003
647650.61	4195799.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.10E-08	6.40E-07	2.65E-09	0.683573	0.003
647190.61	4195819.7	0.001	0.133	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.45E-08	4.98E-06	2.41E-09	5.022015	0.027
647210.61	4195819.7	0.001	0.102	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.39E-08	3.90E-06	2.40E-09	3.947792	0.020
647230.61	4195819.7	0.001	0.076	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.33E-08	3.00E-06	2.39E-09	3.048413	0.015
647250.61	4195819.7	0.001	0.059	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.28E-08	2.41E-06	2.39E-09	2.451358	0.012
647270.61	4195819.7	0.001	0.048	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.25E-08	2.00E-06	2.39E-09	2.04696	0.010
647290.61	4195819.7	0.001	0.040	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.23E-08	1.72E-06	2.40E-09	1.767541	0.008
647310.61	4195819.7	0.001	0.034	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.22E-08	1.51E-06	2.40E-09	1.55007	0.007
647330.61	4195819.7	0.001	0.029	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.21E-08	1.35E-06	2.41E-09	1.393269	0.006
647350.61	4195819.7	0.001	0.026	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.21E-08	1.23E-06	2.42E-09	1.271221	0.005
647370.61	4195819.7	0.001	0.023	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.20E-08	1.13E-06	2.43E-09	1.173822	0.005
647390.61	4195819.7	0.002	0.021	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.20E-08	1.05E-06	2.44E-09	1.094149	0.004
647410.61	4195819.7	0.002	0.019	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.20E-08	9.84E-07	2.45E-09	1.028404	0.004
647430.61	4195819.7	0.002	0.017	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.20E-08	9.28E-07	2.46E-09	0.97261	0.003
647450.61	4195819.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.20E-08	8.81E-07	2.48E-09	0.925052	0.003
647470.61	4195819.7	0.002	0.015	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.19E-08	8.39E-07	2.49E-09	0.883723	0.003
647490.61	4195819.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.18E-08	8.03E-07	2.50E-09	0.84757	0.003
647510.61	4195819.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.17E-08	7.71E-07	2.52E-09	0.81544	0.003
647530.61	4195819.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.15E-08	7.43E-07	2.53E-09	0.786875	0.002
647550.61	4195819.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.13E-08	7.18E-07	2.55E-09	0.761848	0.002
647570.61	4195819.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.11E-08	6.94E-07	2.56E-09	0.737923	0.002
647590.61	4195819.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.08E-08	6.73E-07	2.58E-09	0.716046	0.002
647610.61	4195819.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.04E-08	6.53E-07	2.59E-09	0.696136	0.002
647630.61	4195819.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.01E-08	6.36E-07	2.61E-09	0.678379	0.002
647650.61	4195819.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.97E-08	6.19E-07	2.62E-09	0.660897	0.002
647190.61	4195839.7	0.001	0.127	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.29E-08	4.79E-06	2.38E-09	4.832548	0.026
647210.61	4195839.7	0.001	0.092	0.003	0.008	0.001	0.000	0.000	0.000	0.000	4.22E-08	3.56E-06	2.37E-09	3.600238	0.018
647230.61	4195839.7	0.001	0.067	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.16E-08	2.68E-06	2.37E-09	2.720917	0.013
647250.61	4195839.7	0.001	0.052	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.11E-08	2.13E-06	2.36E-09	2.174307	0.010
647270.61	4195839.7	0.001	0.042	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.08E-08	1.79E-06	2.37E-09	1.831149	0.008
647290.61	4195839.7	0.001	0.035	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.06E-08	1.55E-06	2.37E-09	1.595108	0.007
647310.61	4195839.7	0.001	0.030	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.05E-08	1.37E-06	2.38E-09	1.416785	0.006
647330.61	4195839.7	0.002	0.026	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.04E-08	1.24E-06	2.38E-09	1.283608	0.005
647350.61	4195839.7	0.002	0.023	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.04E-08	1.14E-06	2.39E-09	1.178871	0.005
647370.61	4195839.7	0.002	0.021	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.04E-08	1.05E-06	2.40E-09	1.094689	0.004
647390.61	4195839.7	0.002	0.019	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.04E-08	9.83E-07	2.42E-09	1.025754	0.004
647410.61	4195839.7	0.002	0.017	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.04E-08	9.25E-07	2.43E-09	0.968201	0.004
647430.61	4195839.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.04E-08	8.76E-07	2.44E-09	0.919308	0.003
647450.61	4195839.7	0.002	0.015	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.04E-08	8.34E-07	2.45E-09	0.877298	0.003
647470.61	4195839.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.04E-08	7.98E-07	2.47E-09	0.840658	0.003
647490.61	4195839.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.03E-08	7.66E-07	2.48E-09	0.808415	0.003
647510.61	4195839.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.02E-08	7.37E-07	2.49E-09	0.779731	0.002
647530.61	4195839.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	4.01E-08	7.12E-07	2.51E-09	0.754148	0.002
647550.61	4195839.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.99E-08	6.89E-07	2.52E-09	0.731275	0.002
647570.61	4195839.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.97E-08	6.68E-07	2.54E-09	0.709894	0.002
647590.61	4195839.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.94E-08	6.48E-07	2.55E-09	0.690327	0.002
647610.61	4195839.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.92E-08	6.31E-07	2.57E-09	0.672513	0.002
647630.61	4195839.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.89E-08	6.15E-07	2.58E-09	0.656485	0.002
647650.61	4195839.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.85E-08	6.00E-07	2.60E-09	0.641079	0.002
647190.61	4195859.7	0.001	0.103	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.13E-08	3.93E-06	2.36E-09	3.970869	0.021
647210.61	4195859.7	0.001	0.071	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.06E-08	2.80E-06	2.35E-09	2.842966	0.014
647230.61	4195859.7	0.001	0.054	0.003	0.007	0.001	0.000	0.000	0.000	0.000	4.01E-08	2.19E-06	2.34E-09	2.231783	0.011
647250.61	4195859.7	0.001	0.042	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.96E-08	1.79E-06	2.34E-09	1.834784	0.008
647270.61	4195859.7	0.001	0.035	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.93E-08	1.54E-06	2.34E-09	1.584242	0.007
647290.61	4195859.7	0.002	0.030	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.91E-08	1.37E-06	2.34E-09	1.406713	0.006
647310.61	4195859.7	0.002	0.026	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.89E-08	1.23E-06	2.35E-09	1.273146	0.005
647330.61	4195859.7	0.002	0.023	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.88E-08	1.12E-06	2.36E-09	1.164496	0.005
647350.61	4195859.7	0.002	0.021	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.88E-08	1.04E-06	2.37E-09	1.080129	0.004
647370.61	4195859.7	0.002	0.019	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.88E-08	9.72E-07	2.38E-09	1.012783	0.004

647390.61	4195859.7	0.002	0.017	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.88E-08	9.14E-07	2.39E-09	0.955507	0.003
647410.61	4195859.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.88E-08	8.66E-07	2.40E-09	0.907226	0.003
647430.61	4195859.7	0.002	0.015	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.89E-08	8.24E-07	2.41E-09	0.865728	0.003
647450.61	4195859.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.89E-08	7.89E-07	2.43E-09	0.829841	0.003
647470.61	4195859.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.89E-08	7.57E-07	2.44E-09	0.798153	0.003
647490.61	4195859.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.88E-08	7.29E-07	2.45E-09	0.770134	0.002
647510.61	4195859.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.88E-08	7.04E-07	2.47E-09	0.745078	0.002
647530.61	4195859.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.87E-08	6.81E-07	2.48E-09	0.722542	0.002
647550.61	4195859.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.86E-08	6.61E-07	2.50E-09	0.7023	0.002
647570.61	4195859.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.84E-08	6.43E-07	2.51E-09	0.683443	0.002
647590.61	4195859.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.82E-08	6.26E-07	2.53E-09	0.666216	0.002
647610.61	4195859.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.79E-08	6.10E-07	2.55E-09	0.650537	0.002
647630.61	4195859.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.77E-08	5.96E-07	2.56E-09	0.636282	0.002
647650.61	4195859.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.74E-08	5.83E-07	2.58E-09	0.622686	0.002
647190.61	4195879.7	0.001	0.053	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.99E-08	2.15E-06	2.33E-09	2.194242	0.011
647210.61	4195879.7	0.001	0.045	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.92E-08	1.88E-06	2.32E-09	1.921366	0.009
647230.61	4195879.7	0.001	0.038	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.87E-08	1.65E-06	2.32E-09	1.690122	0.008
647250.61	4195879.7	0.002	0.033	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.82E-08	1.44E-06	2.31E-09	1.484824	0.007
647270.61	4195879.7	0.002	0.028	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.78E-08	1.29E-06	2.31E-09	1.334615	0.006
647290.61	4195879.7	0.002	0.025	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.76E-08	1.18E-06	2.32E-09	1.219291	0.005
647310.61	4195879.7	0.002	0.022	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.75E-08	1.09E-06	2.33E-09	1.128536	0.005
647330.61	4195879.7	0.002	0.020	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.73E-08	1.01E-06	2.33E-09	1.047629	0.004
647350.61	4195879.7	0.002	0.018	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.73E-08	9.44E-07	2.34E-09	0.983558	0.004
647370.61	4195879.7	0.002	0.017	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.73E-08	8.92E-07	2.35E-09	0.931413	0.003
647390.61	4195879.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.73E-08	8.46E-07	2.37E-09	0.886168	0.003
647410.61	4195879.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.73E-08	8.07E-07	2.38E-09	0.846969	0.003
647430.61	4195879.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.74E-08	7.73E-07	2.39E-09	0.812693	0.003
647450.61	4195879.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.74E-08	7.43E-07	2.40E-09	0.782864	0.003
647470.61	4195879.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.74E-08	7.16E-07	2.42E-09	0.755888	0.002
647490.61	4195879.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.74E-08	6.93E-07	2.43E-09	0.732403	0.002
647510.61	4195879.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.74E-08	6.71E-07	2.44E-09	0.71097	0.002
647530.61	4195879.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.73E-08	6.52E-07	2.46E-09	0.691817	0.002
647550.61	4195879.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.73E-08	6.35E-07	2.47E-09	0.674564	0.002
647570.61	4195879.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.71E-08	6.18E-07	2.49E-09	0.657941	0.002
647590.61	4195879.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.69E-08	6.03E-07	2.51E-09	0.642869	0.002
647610.61	4195879.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.67E-08	5.90E-07	2.52E-09	0.629295	0.002
647630.61	4195879.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.65E-08	5.78E-07	2.54E-09	0.617253	0.002
647650.61	4195879.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.63E-08	5.67E-07	2.55E-09	0.605436	0.002
647210.61	4195899.7	0.002	0.028	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.79E-08	1.27E-06	2.30E-09	1.308236	0.006
647230.61	4195899.7	0.002	0.026	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.73E-08	1.22E-06	2.29E-09	1.257574	0.005
647250.61	4195899.7	0.002	0.024	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.69E-08	1.15E-06	2.29E-09	1.184592	0.005
647270.61	4195899.7	0.002	0.022	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.65E-08	1.07E-06	2.29E-09	1.111297	0.004
647290.61	4195899.7	0.002	0.020	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.63E-08	1.01E-06	2.29E-09	1.048478	0.004
647310.61	4195899.7	0.002	0.019	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.61E-08	9.54E-07	2.30E-09	0.99287	0.004
647330.61	4195899.7	0.002	0.017	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.60E-08	9.02E-07	2.31E-09	0.940084	0.003
647350.61	4195899.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.59E-08	8.56E-07	2.32E-09	0.893841	0.003
647370.61	4195899.7	0.002	0.015	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.59E-08	8.17E-07	2.33E-09	0.854998	0.003
647390.61	4195899.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.59E-08	7.82E-07	2.34E-09	0.820279	0.003
647410.61	4195899.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.60E-08	7.51E-07	2.35E-09	0.789626	0.003
647430.61	4195899.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.60E-08	7.24E-07	2.37E-09	0.762194	0.002
647450.61	4195899.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.60E-08	7.00E-07	2.38E-09	0.738386	0.002
647470.61	4195899.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.61E-08	6.78E-07	2.39E-09	0.716391	0.002
647490.61	4195899.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.61E-08	6.58E-07	2.41E-09	0.696596	0.002
647510.61	4195899.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.61E-08	6.40E-07	2.42E-09	0.678464	0.002
647530.61	4195899.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.61E-08	6.24E-07	2.44E-09	0.662667	0.002
647550.61	4195899.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.60E-08	6.10E-07	2.45E-09	0.648062	0.002
647570.61	4195899.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.59E-08	5.96E-07	2.47E-09	0.633898	0.002
647590.61	4195899.7	0.002	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.58E-08	5.83E-07	2.48E-09	0.621014	0.002
647610.61	4195899.7	0.002	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.56E-08	5.71E-07	2.50E-09	0.609497	0.002
647630.61	4195899.7	0.002	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.54E-08	5.61E-07	2.52E-09	0.59922	0.002
647650.61	4195899.7	0.002	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.52E-08	5.51E-07	2.53E-09	0.589005	0.002
647210.61	4195919.7	0.002	0.020	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.66E-08	9.83E-07	2.27E-09	1.021692	0.004
647230.61	4195919.7	0.002	0.019	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.61E-08	9.61E-07	2.27E-09	0.999041	0.004
647250.61	4195919.7	0.002	0.018	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.56E-08	9.36E-07	2.27E-09	0.973579	0.004
647270.61	4195919.7	0.002	0.017	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.53E-08	9.00E-07	2.27E-09	0.937908	0.003
647290.61	4195919.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.50E-08	8.70E-07	2.27E-09	0.906797	0.003
647310.61	4195919.7	0.002	0.016	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.48E-08	8.38E-07	2.28E-09	0.874729	0.003
647330.61	4195919.7	0.002	0.015	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.47E-08	8.07E-07	2.29E-09	0.844055	0.003
647350.61	4195919.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.46E-08	7.76E-07	2.30E-09	0.812725	0.003
647370.61	4195919.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.46E-08	7.48E-07	2.31E-09	0.785318	0.003
647390.61	4195919.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.46E-08	7.23E-07	2.32E-09	0.760203	0.002
647410.61	4195919.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.47E-08	6.99E-07	2.33E-09	0.736403	0.002
647430.61	4195919.7	0.002	0.011	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.47E-08	6.78E-07	2.34E-09	0.715468	0.002
647450.61	4195919.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.48E-08	6.60E-07	2.36E-09	0.696746	0.002
647470.61	4195919.7	0.002	0.010	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.48E-08	6.43E-07	2.37E-09	0.679814	0.002
647490.61	4195919.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.48E-08	6.26E-07	2.38E-09	0.663165	0.002
647510.61	4195919.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.48E-08	6.11E-07	2.40E-09	0.648019	0.002
647530.61	4195919.7	0.002	0.009	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.49E-08	5.98E-07	2.41E-09	0.634904	0.002
647550.61	4195919.7	0.002	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.48E-08	5.86E-07	2.43E-09	0.62288	0.002
647570.61	4195919.7	0.002	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.48E-08	5.74E-07	2.44E-09	0.610986	0.002
647590.61	4195919.7	0.002	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.47E-08	5.63E-07	2.46E-09	0.600261	0.002
647610.61	4195919.7	0.002	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.45E-08	5.54E-07	2.48E-09	0.590743	0.002
647630.61	4195919.7	0.002	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.44E-08	5.45E-07	2.49E-09	0.582128	0.002
647650.61	4195919.7	0.002	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.42E-08	5.37E-07	2.51E-09	0.573538	0.002
647210.61	4195939.7	0.002	0.015	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.54E-08	8.30E-07	2.25E-09	0.867308	0.003
647230.61	4195939.7	0.002	0.015	0.003	0.007	0.001	0.000	0.000	0.000	0.000	3.49E-08	8.15E-07	2.24E-09	0.851998	0.003
647250.61	4195939.7	0.002	0.015	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.45E-08	8.01E-07	2.24E-09	0.838198	0.003
647270.61	4195939.7	0.002	0.014	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.41E-08	7.80E-07	2.24E-09	0.816716	0.003
647290.61	4195939.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.38E-08	7.62E-07	2.25E-09	0.798096	0.003
647310.61	4195939.7	0.002	0.013	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.36E-08	7.44E-07	2.26E-09	0.779737	0.003
647330.61	4195939.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.35E-08	7.27E-07	2.27E-09	0.762399	0.003
647350.61	4195939.7	0.002	0.012	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.35E-08	7.07E-07	2.28E-09	0.742732	0.002
647370.61	4195939.7	0.002	0.011	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.34E-08	6.88E-07	2.29E-09	0.724204	0.002
647390.61	4195939.7	0.002	0.011	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.34E-08	6.70E-07	2.30E-09	0.705916	0.002
647410.61	4195939.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.34E-08	6.52E-07	2.31E-09	0.688196	0.002
647430.61	4195939.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.35E-08	6.36E-07	2.32E-09	0.672226	0.002
647450.61	4195939.7	0.002	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.35E-08	6.22E-07	2.33E-09	0.65795	0.002
647470.61	4195939.7	0.002	0.009	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.36E-08	6.09E-07	2.35E-09	0.644961	0.002
647490.61	4195939.7	0.002	0.009	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.37E-08	5.96E-07	2.36E-09	0.631684	0.002
647510.61	4195939.7	0.002	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.37E-08	5.84E-07	2.37E-09	0.619554	0.002
647530.61	4195939.7	0.002	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.37E-08	5.73E-07	2.39E-09	0.608983	0.002

647550.61	4195939.7	0.002	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.37E-08	5.63E-07	2.41E-09	0.599232	0.002
647570.61	4195939.7	0.002	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.37E-08	5.53E-07	2.42E-09	0.589495	0.002
647590.61	4195939.7	0.002	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	3.36E-08	5.45E-07	2.44E-09	0.580715	0.002
647610.61	4195939.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.35E-08	5.37E-07	2.46E-09	0.573038	0.002
647630.61	4195939.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.34E-08	5.30E-07	2.47E-09	0.566035	0.002
647650.61	4195939.7	0.002	0.006	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.32E-08	5.23E-07	2.49E-09	0.559084	0.002
647230.61	4195959.7	0.002	0.012	0.003	0.007	0.000	0.000	0.000	0.000	0.000	3.38E-08	7.21E-07	2.22E-09	0.756873	0.002
647250.61	4195959.7	0.002	0.012	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.34E-08	7.12E-07	2.22E-09	0.747777	0.002
647270.61	4195959.7	0.002	0.012	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.30E-08	6.99E-07	2.22E-09	0.734089	0.002
647290.61	4195959.7	0.002	0.011	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.27E-08	6.85E-07	2.23E-09	0.719645	0.002
647310.61	4195959.7	0.002	0.011	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.25E-08	6.73E-07	2.23E-09	0.707826	0.002
647330.61	4195959.7	0.002	0.011	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.24E-08	6.62E-07	2.24E-09	0.696248	0.002
647350.61	4195959.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.23E-08	6.49E-07	2.25E-09	0.683817	0.002
647370.61	4195959.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.23E-08	6.36E-07	2.26E-09	0.670292	0.002
647390.61	4195959.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.23E-08	6.23E-07	2.28E-09	0.657366	0.002
647410.61	4195959.7	0.002	0.009	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.23E-08	6.10E-07	2.29E-09	0.644987	0.002
647430.61	4195959.7	0.002	0.009	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.23E-08	5.99E-07	2.30E-09	0.633357	0.002
647450.61	4195959.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.24E-08	5.88E-07	2.31E-09	0.622658	0.002
647470.61	4195959.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.25E-08	5.78E-07	2.33E-09	0.613092	0.002
647490.61	4195959.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.25E-08	5.68E-07	2.34E-09	0.602568	0.002
647510.61	4195959.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.26E-08	5.58E-07	2.35E-09	0.593177	0.002
647530.61	4195959.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.26E-08	5.50E-07	2.37E-09	0.584942	0.002
647550.61	4195959.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.26E-08	5.42E-07	2.39E-09	0.577209	0.002
647570.61	4195959.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.26E-08	5.35E-07	2.40E-09	0.569516	0.002
647590.61	4195959.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.25E-08	5.28E-07	2.42E-09	0.562573	0.002
647610.61	4195959.7	0.002	0.006	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.25E-08	5.22E-07	2.43E-09	0.556595	0.002
647630.61	4195959.7	0.002	0.006	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.24E-08	5.16E-07	2.45E-09	0.551116	0.002
647650.61	4195959.7	0.003	0.006	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.23E-08	5.11E-07	2.46E-09	0.545435	0.002
647230.61	4195979.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.28E-08	6.53E-07	2.20E-09	0.688034	0.002
647250.61	4195979.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.24E-08	6.47E-07	2.20E-09	0.681846	0.002
647270.61	4195979.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.20E-08	6.40E-07	2.20E-09	0.674296	0.002
647290.61	4195979.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.17E-08	6.29E-07	2.21E-09	0.662763	0.002
647310.61	4195979.7	0.002	0.010	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.15E-08	6.20E-07	2.21E-09	0.653334	0.002
647330.61	4195979.7	0.002	0.009	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.14E-08	6.11E-07	2.22E-09	0.644349	0.002
647350.61	4195979.7	0.002	0.009	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.13E-08	6.02E-07	2.23E-09	0.635959	0.002
647370.61	4195979.7	0.002	0.009	0.002	0.007	0.000	0.000	0.000	0.000	0.000	3.12E-08	5.93E-07	2.24E-09	0.62601	0.002
647390.61	4195979.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.12E-08	5.83E-07	2.25E-09	0.616688	0.002
647410.61	4195979.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.12E-08	5.74E-07	2.27E-09	0.607838	0.002
647430.61	4195979.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.13E-08	5.66E-07	2.28E-09	0.599332	0.002
647450.61	4195979.7	0.002	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.13E-08	5.58E-07	2.29E-09	0.591396	0.002
647470.61	4195979.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.14E-08	5.51E-07	2.31E-09	0.584405	0.002
647490.61	4195979.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.14E-08	5.43E-07	2.32E-09	0.576333	0.002
647510.61	4195979.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.15E-08	5.35E-07	2.33E-09	0.569161	0.002
647530.61	4195979.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.15E-08	5.29E-07	2.35E-09	0.562833	0.002
647550.61	4195979.7	0.002	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.16E-08	5.23E-07	2.36E-09	0.556716	0.002
647570.61	4195979.7	0.002	0.006	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.16E-08	5.17E-07	2.38E-09	0.551042	0.002
647590.61	4195979.7	0.002	0.006	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.16E-08	5.12E-07	2.40E-09	0.545975	0.002
647610.61	4195979.7	0.003	0.006	0.002	0.006	0.000	0.000	0.000	0.000	0.000	3.15E-08	5.08E-07	2.41E-09	0.54154	0.002

Mossdale Tract Construction HRA - Part 2

Cancer Risk and Hazard Index - Offsite Residential - Uncontrolled

						Exposure Duration (Days)				DPM	
					Start Date	7/3/2026	10/2/2026	10/2/2028			
					Stop Date	10/1/2026	10/1/2028			Emisions (tons)	Emission Rate (g/s)
Source		Year	Start Date	End Date	Calendar Days	3rd Trimester	0<2	2<9	Exposure Duration	Uncontrolled	Uncontrolled
ID 7	ARLN16	2026	7/3/2026	12/31/2026	181	90	90	1	181	0.08	0.007
ID 7	ARLN16	2027	1/1/2027	12/26/2027	359	0	359	0	359	0.02	0.001
ID 7	ARLN16	2028	7/18/2028	10/14/2028	88	0	75	13	88	0.00	0.000
ID Babcd	ARLN10	2028	7/1/2028	12/31/2028	183	0	92	91	183	0.05	0.005
ID Babcd	ARLN10	2029	1/1/2029	11/20/2029	323	0	0	323	323	0.03	0.00
ID Babcd	ARLN10	2030	7/1/2030	9/28/2030	89	0	0	89	89	0.02	0.004
ID 9	ARLN17	2028	7/1/2028	12/15/2028	167	0	92	75	167	0.03	0.003
ID 9	ARLN17	2029	7/17/2029	10/30/2029	105	0	0	105	105	0.00	0.000
ID 10	ARLN18	2030	5/25/2030	10/19/2030	147	0	0	147	147	0.02	0.002
AR7	ARLN2	2026	7/3/2026	12/31/2026	181	90	90	1	181	0.00	0.000
AR7	ARLN2	2027	1/1/2027	6/18/2027	168	0	168	0	168	0.00	0.000
AR8	ARLN3	2026	7/3/2026	12/31/2026	181	90	90	1	181	0.00	0.000
AR8	ARLN3	2027	1/1/2027	6/18/2027	168	0	168	0	168	0.00	0.000
AR9	ARLN4	2026	7/3/2026	12/31/2026	181	90	90	1	181	0.00	0.000
AR9	ARLN4	2027	1/1/2027	6/18/2027	168	0	168	0	168	0.00	0.000
AR10	ARLN5	2028	7/1/2028	12/31/2028	183	0	92	91	183	0.00	0.000
AR10	ARLN5	2029	1/1/2029	9/29/2029	271	0	0	271	271	0.00	0.000
AR10	ARLN5	2028	7/1/2030	9/28/2030	89	0	0	89	89	0.00	0.000
										0.25	

Cancer Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	2<9	
Daily Breathing Rate	DBR	L/kg-day	361	1090	631	
Fraction Of Time At Home	FAH	unitless	1	1	1	Conservatively assume risk at nearby schools >1
Exposure Frequency	EF	days/year	0.96	0.96	0.96	
Age Sensitivity Factor	ASF	unitless	10	10	3	
Inhalation Absorption Factor	A	unitless	1	1	1	
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001	
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001	
Cancer Potency Factor (diesel exhaust)	CPF	$mg/kg\text{-}day^{-1}$	1.1	1.1	1.1	
Averaging Time (for residential exposure)	AT	years	70.00	70.00	70.00	

SOURCE: Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments* . February 2015

Daily breathing rate for residential receptor is based on the OEHHA 95th percentile moderate intensity breathing rates (OEHHA Table 5.7).

Fraction of time at home is set to values per OEHHA Table 8.4 for residential since the nearest school has an unmitigated cancer risk of <1 per million.

Inhalation cancer potency factor from OEHHA Table 7.1

Hazard Index

Chronic Inhalation	REL	$\mu g/m^3$	5

Intake Factor for Inhalation, IF (m^3/kg-day) = DBR*FAH*EF*ED*ASF*A*CF/AT

Source	3rd Trimester	0<2	2<9
ID 7	0.012	0.037	0.000
ID 7	0.000	0.147	0.000
ID 7	0.000	0.031	0.001
ID Babcd	0.000	0.038	0.006
ID Babcd	0.000	0.000	0.023
ID Babcd	0.000	0.000	0.006
ID 9	0.000	0.038	0.005
ID 9	0.000	0.000	0.007
ID 10	0.000	0.000	0.010
AR7	0.012	0.037	0.000
AR7	0.000	0.069	0.000
AR8	0.012	0.037	0.000
AR8	0.000	0.069	0.000
AR9	0.012	0.037	0.000
AR9	0.000	0.069	0.000
AR10	0.000	0.038	0.006
AR10	0.000	0.000	0.019
AR10	0.000	0.000	0.006

Risk Calculation Part 1, R1 = IF*CPF*CF

3rd Trimester	0<2	2<9
1.34E-05	4.05E-05	7.81E-08
0.00E+00	1.62E-04	0.00E+00
0.00E+00	3.37E-05	1.02E-06
0.00E+00	4.14E-05	7.11E-06
0.00E+00	0.00E+00	2.52E-05
0.00E+00	0.00E+00	6.96E-06
0.00E+00	4.14E-05	5.86E-06
0.00E+00	0.00E+00	8.21E-06
0.00E+00	0.00E+00	1.15E-05
1.34E-05	4.05E-05	7.81E-08
0.00E+00	7.56E-05	0.00E+00
1.34E-05	4.05E-05	7.81E-08
0.00E+00	7.56E-05	0.00E+00
1.34E-05	4.05E-05	7.81E-08
0.00E+00	7.56E-05	0.00E+00
0.00E+00	4.14E-05	7.11E-06
0.00E+00	0.00E+00	2.12E-05
0.00E+00	0.00E+00	6.96E-06

	Cancer Risk	UTM X	UTM Y
MAX UNCONTROLLED	4.03	649209.3	4184319.61

HI	UTM X	UTM Y
0.01	649209.3	4184319.61

Diesel Particulate Matter concentration, C_{DPM} ($\mu g/m^3$)

		Project Construction																
X (UTM)	Y (UTM)	ID 7	ID 7	ID 7	ID Babcd	ID Babcd	ID Babcd	ID 9	ID 9	ID 10	AR7	AR7	AR8	AR8	AR9	AR9	AR10	AR10	AR10
		2026	2027	2028	2028	2029	2030	2028	2029	2030	2026	2027	2026	2027	2026	2027	2028	2029	2028
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
647495.03	4190391.71	0.029	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647515.03	4190411.71	0.030	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647535.03	4190431.71	0.030	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647695.03	4190431.71	0.041	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647715.03	4190431.71	0.042	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647555.03	4190451.71	0.027	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647575.03	4190451.71	0.029	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647635.03	4190451.71	0.033	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647695.03	4190451.71	0.032	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647715.03	4190451.71	0.034	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647735.03	4190451.71	0.035	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647755.03	4190451.71	0.037	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647595.03	4190471.71	0.024	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647615.03	4190471.71	0.025	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647755.03	4190471.71	0.034	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647655.03	4190491.71	0.021	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647675.03	4190491.71	0.022	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647755.03	4190491.71	0.032	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647675.03	4190511.71	0.020	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647675.03	4190531.71	0.018	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647695.03	4190531.71	0.020	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647675.03	4190551.71	0.018	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647695.03	4190551.71	0.020	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
647675.03	4190571.71	0.017	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Risk Calculation Part 2

	Cancer Risk = $\sum$R1*C_{DPM}				HI
3rd Trimeste	0<2	2<9	Total		C_{DPM}/REL
					unitless
3.95E-07	1.94E-06	7.79E-09	2.342116		0.006
4.00E-07	1.97E-06	7.80E-09	2.373497		0.006
4.01E-07	1.97E-06	7.77E-09	2.377757		0.006
5.49E-07	2.69E-06	9.11E-09	3.25338		0.008
5.60E-07	2.75E-06	9.20E-09	3.318284		0.008
3.66E-07	1.80E-06	7.40E-09	2.170619		0.005
3.94E-07	1.94E-06	7.66E-09	2.338218		0.006
4.38E-07	2.15E-06	8.04E-09	2.594998		0.007
4.28E-07	2.10E-06	7.91E-09	2.536686		0.006
4.54E-07	2.23E-06	8.15E-09	2.692731		0.007
4.70E-07	2.31E-06	8.30E-09	2.786297		0.007
4.93E-07	2.42E-06	8.51E-09	2.919859		0.007
3.25E-07	1.60E-06	6.96E-09	1.930445		0.005
3.31E-07	1.63E-06	7.00E-09	1.963399		0.005
4.50E-07	2.21E-06	8.07E-09	2.666763		0.007
2.85E-07	1.40E-06	6.50E-09	1.692891		0.004
2.98E-07	1.46E-06	6.61E-09	1.767897		0.004
4.30E-07	2.11E-06	7.85E-09	2.549151		0.006
2.66E-07	1.31E-06	6.28E-09	1.579452		0.004
2.46E-07	1.21E-06	6.07E-09	1.463927		0.004
2.70E-07	1.33E-06	6.29E-09	1.606634		0.004
2.35E-07	1.16E-06	5.93E-09	1.397389		0.004
2.63E-07	1.30E-06	6.20E-09	1.56477		0.004
2.24E-07	1.11E-06	5.81E-09	1.336367		0.003

647695.03	4190571.71	0.020	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.62E-07	1.29E-06	6.16E-09	1.557473	0.004
647715.03	4190571.71	0.024	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.19E-07	1.57E-06	6.70E-09	1.893215	0.005
647675.03	4190591.71	0.016	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.05E-06	5.68E-09	1.271968	0.003
647695.03	4190591.71	0.020	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.63E-07	1.29E-06	6.15E-09	1.563436	0.004
647715.03	4190591.71	0.024	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.23E-07	1.59E-06	6.72E-09	1.919181	0.005
647675.03	4190611.71	0.015	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.02E-06	5.59E-09	1.236298	0.003
647695.03	4190611.71	0.020	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.63E-07	1.29E-06	6.12E-09	1.563338	0.004
647675.03	4190631.71	0.015	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	9.98E-07	5.52E-09	1.205649	0.003
647419.23	4190111.88	0.013	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-07	8.82E-07	6.11E-09	1.065785	0.003
647449.21	4190105.57	0.015	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.00E-06	6.35E-09	1.213298	0.003
648003.74	4189070.22	0.012	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-07	8.31E-07	7.93E-09	1.006026	0.002
647945.66	4188974.2	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.17E-07	5.87E-07	7.83E-09	0.712215	0.002
648305.45	4186351.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1.93E-08	5.85E-07	2.36E-07	0.841237	0.002
648325.45	4186351.83	0.001	0.000	0.000	0.009	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	2.69E-08	6.04E-07	2.11E-07	0.84267	0.002
648285.45	4186371.83	0.001	0.000	0.000	0.012	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-08	6.01E-07	2.66E-07	0.881397	0.002
648305.45	4186371.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-08	5.43E-07	2.33E-07	0.790733	0.002
648325.45	4186371.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-08	5.05E-07	2.09E-07	0.729253	0.002
648345.45	4186371.83	0.001	0.000	0.000	0.008	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1.76E-08	4.82E-07	1.90E-07	0.689305	0.002
648365.45	4186371.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	2.11E-08	4.85E-07	1.75E-07	0.680821	0.002
648285.45	4186391.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	5.74E-07	2.58E-07	0.846003	0.002
648305.45	4186391.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	5.19E-07	2.27E-07	0.760108	0.002
648325.45	4186391.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-08	4.81E-07	2.04E-07	0.699611	0.002
648345.45	4186391.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-08	4.52E-07	1.87E-07	0.653602	0.002
648365.45	4186391.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	4.33E-07	1.73E-07	0.62125	0.002
648385.45	4186391.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	4.21E-07	1.61E-07	0.5993	0.002
648405.45	4186391.83	0.001	0.000	0.000	0.007	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1.91E-08	4.22E-07	1.51E-07	0.592188	0.001
648285.45	4186411.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	5.48E-07	2.47E-07	0.808631	0.002
648305.45	4186411.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.32E-08	4.99E-07	2.20E-07	0.73229	0.002
648325.45	4186411.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	4.63E-07	1.99E-07	0.675872	0.002
648345.45	4186411.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	4.36E-07	1.83E-07	0.632369	0.002
648365.45	4186411.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-08	4.15E-07	1.70E-07	0.599808	0.002
648385.45	4186411.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-08	4.00E-07	1.59E-07	0.573571	0.002
648405.45	4186411.83	0.001	0.000	0.000	0.007	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	3.88E-07	1.50E-07	0.553951	0.001
648425.45	4186411.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-08	3.82E-07	1.42E-07	0.541018	0.001
648445.45	4186411.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1.83E-08	3.82E-07	1.35E-07	0.535494	0.001
648265.45	4186431.83	0.001	0.000	0.000	0.012	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.24E-08	5.82E-07	2.68E-07	0.861968	0.002
648285.45	4186431.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-08	5.23E-07	2.36E-07	0.771553	0.002
648305.45	4186431.83	0.001	0.000	0.000	0.009	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	4.81E-07	2.12E-07	0.706291	0.002
648325.45	4186431.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	4.49E-07	1.94E-07	0.656278	0.002
648345.45	4186431.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	4.24E-07	1.79E-07	0.61699	0.002
648365.45	4186431.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	4.04E-07	1.68E-07	0.585597	0.002
648385.45	4186431.83	0.001	0.000	0.000	0.007	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-08	3.88E-07	1.58E-07	0.560007	0.001
648405.45	4186431.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-08	3.76E-07	1.49E-07	0.539165	0.001
648425.45	4186431.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-08	3.66E-07	1.42E-07	0.522677	0.001
648445.45	4186431.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-08	3.58E-07	1.35E-07	0.5085	0.001
648465.45	4186431.83	0.001	0.000	0.000	0.006	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-08	3.53E-07	1.29E-07	0.498409	0.001
648485.45	4186431.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-08	3.54E-07	1.23E-07	0.4946	0.001
648505.45	4186431.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	2.00E-08	3.64E-07	1.18E-07	0.502436	0.001
648265.45	4186451.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-08	5.49E-07	2.51E-07	0.812137	0.002
648285.45	4186451.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.25E-08	5.02E-07	2.25E-07	0.739286	0.002
648305.45	4186451.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-08	4.66E-07	2.06E-07	0.68471	0.002
648325.45	4186451.83	0.001	0.000	0.000	0.008	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	4.39E-07	1.90E-07	0.641494	0.002
648345.45	4186451.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	4.16E-07	1.77E-07	0.60595	0.002
648365.45	4186451.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	3.97E-07	1.66E-07	0.57659	0.002
648385.45	4186451.83	0.001	0.000	0.000	0.007	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	3.82E-07	1.57E-07	0.55215	0.001
648405.45	4186451.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	3.69E-07	1.49E-07	0.5314	0.001
648425.45	4186451.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.43E-08	3.58E-07	1.41E-07	0.513546	0.001
648445.45	4186451.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-08	3.49E-07	1.35E-07	0.497866	0.001
648465.45	4186451.83	0.001	0.000	0.000	0.006	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-08	3.41E-07	1.29E-07	0.484769	0.001
648485.45	4186451.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-08	3.36E-07	1.23E-07	0.475088	0.001
648505.45	4186451.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	3.33E-07	1.19E-07	0.46755	0.001
648525.45	4186451.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-08	3.34E-07	1.14E-07	0.465194	0.001
648545.45	4186451.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1.91E-08	3.39E-07	1.10E-07	0.468396	0.001
648265.45	4186471.83	0.001	0.000	0.000	0.011	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-08	5.24E-07	2.38E-07	0.774457	0.002
648285.45	4186471.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.25E-08	4.86E-07	2.17E-07	0.715686	0.002
648305.45	4186471.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-08	4.56E-07	2.01E-07	0.670028	0.002
648325.45	4186471.83	0.001	0.000	0.000	0.008	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	4.32E-07	1.87E-07	0.632104	0.002
648345.45	4186471.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.30E-08	4.11E-07	1.76E-07	0.5998	0.002
648365.45	4186471.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.32E-08	3.94E-07	1.65E-07	0.572045	0.002
648385.45	4186471.83	0.001	0.000	0.000	0.007	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	3.79E-07	1.57E-07	0.548419	0.001
648405.45	4186471.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	3.66E-07	1.49E-07	0.527878	0.001
648425.45	4186471.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	3.54E-07	1.42E-07	0.509615	0.001
648445.45	4186471.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	3.44E-07	1.35E-07	0.493328	0.001
648465.45	4186471.83	0.001	0.000	0.000	0.006	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-08	3.35E-07	1.29E-07	0.479057	0.001
648485.45	4186471.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-08	3.28E-07	1.24E-07	0.46706	0.001
648505.45	4186471.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	3.23E-07	1.19E-07	0.456768	0.001
648525.45	4186471.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	3.19E-07	1.15E-07	0.449021	0.001
648545.45	4186471.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-08	3.16E-07	1.10E-07	0.443192	0.001
648565.45	4186471.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-08	3.16E-07	1.07E-07	0.439482	0.001
648585.45	4186471.83	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	3.18E-07	1.03E-07	0.439249	0.001
648605.45	4186471.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	2.06E-08	3.30E-07	9.89E-08	0.449186	0.001
648245.45	4186491.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.22E-08	5.46E-07	2.51E-07	0.80832	0.002
648265.45	4186491.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-08	5.09E-07	2.30E-07	0.751235	0.002
648285.45	4186491.83	0.001	0.000	0.000	0.009	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.25E-08	4.78E-07	2.13E-07	0.703481	0.002
648305.45	4186491.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-08	4.52E-07	1.99E-07	0.663628	0.002
648325.45	4186491.83	0.001	0.000	0.000	0.008	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	4.30E-07	1.87E-07	0.629406	0.002
648345.45	4186491.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	4.10E-07	1.76E-07	0.599155	0.002
648365.45	4186491.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	3.93E-07	1.66E-07	0.572447	0.002
648385.45	4186491.83	0.001	0.000	0.000	0.007	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	3.78E-07	1.57E-07	0.549076	0.001
648405.45	4186491.83	0.001	0.000	0.000	0.007	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	3.65E-07	1.50E-07	0.528253	0.001
648425.45	4186491.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	3.53E-07	1.42E-07	0.509306	0.001
648445.45	4186491.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	3.42E-07	1.36E-07	0.492064	0.001
648465.45	4186491.83	0.001	0.000	0.000	0.006	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	3.33E-07	1.30E-07	0.476927	0.001
648485.45	4186491.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-08	3.25E-07	1.24E-07	0.463876	0.001
648505.45	4186491.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-08	3.18E-07	1.20E-07	0.452613	0.001
648525.45	4186491.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-08	3.12E-07	1.15E-07	0.44258	0.001
648545.45	4186491.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-08	3.08E-07	1.11E-07	0.434099	0.001
648565.45	4186491.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-08	3.03E-07	1.07E-07	0.426064	0.001
648585.45	4186491.83	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	3.00E-07	1.03E-07	0.419765	0.001
648605.45	4186491.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-08	2.99E-07	9.92E-08	0.415767	0.001
648625.45	4186491.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-08	3.00E-07	9.55E-08	0.413345	0.001

648645.45	4186491.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-08	3.06E-07	9.21E-08	0.417877	0.001
648665.45	4186491.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	2.32E-08	3.32E-07	8.89E-08	0.443723	0.001
648245.45	4186511.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-08	5.32E-07	2.44E-07	0.787836	0.002
648265.45	4186511.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.24E-08	5.03E-07	2.28E-07	0.743148	0.002
648285.45	4186511.83	0.001	0.000	0.000	0.009	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.25E-08	4.77E-07	2.13E-07	0.703053	0.002
648305.45	4186511.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-08	4.54E-07	2.00E-07	0.666638	0.002
648325.45	4186511.83	0.001	0.000	0.000	0.008	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	4.33E-07	1.89E-07	0.633989	0.002
648345.45	4186511.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	4.14E-07	1.78E-07	0.604555	0.002
648365.45	4186511.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	3.96E-07	1.68E-07	0.577835	0.002
648385.45	4186511.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.32E-08	3.81E-07	1.60E-07	0.553852	0.002
648405.45	4186511.83	0.001	0.000	0.000	0.007	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	3.67E-07	1.52E-07	0.53223	0.001
648425.45	4186511.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	3.55E-07	1.44E-07	0.512254	0.001
648445.45	4186511.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	3.43E-07	1.37E-07	0.494009	0.001
648465.45	4186511.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.40E-08	3.33E-07	1.31E-07	0.477785	0.001
648485.45	4186511.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	3.24E-07	1.26E-07	0.463634	0.001
648505.45	4186511.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-08	3.16E-07	1.21E-07	0.451428	0.001
648525.45	4186511.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-08	3.10E-07	1.16E-07	0.440412	0.001
648545.45	4186511.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.50E-08	3.04E-07	1.12E-07	0.43015	0.001
648565.45	4186511.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.98E-07	1.07E-07	0.420597	0.001
648585.45	4186511.83	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	2.93E-07	1.03E-07	0.411946	0.001
648605.45	4186511.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-08	2.89E-07	9.95E-08	0.404198	0.001
648625.45	4186511.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	2.85E-07	9.58E-08	0.397034	0.001
648645.45	4186511.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.70E-08	2.83E-07	9.23E-08	0.392506	0.001
648665.45	4186511.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-08	2.83E-07	8.91E-08	0.389768	0.001
648685.45	4186511.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-08	2.85E-07	8.60E-08	0.389148	0.001
648705.45	4186511.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-08	2.90E-07	8.32E-08	0.392988	0.001
648245.45	4186531.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-08	5.34E-07	2.45E-07	0.791636	0.002
648265.45	4186531.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.25E-08	5.09E-07	2.31E-07	0.752873	0.002
648285.45	4186531.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-08	4.85E-07	2.18E-07	0.715952	0.002
648305.45	4186531.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-08	4.62E-07	2.05E-07	0.680454	0.002
648325.45	4186531.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	4.41E-07	1.93E-07	0.646857	0.002
648345.45	4186531.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.30E-08	4.21E-07	1.82E-07	0.616081	0.002
648365.45	4186531.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	4.03E-07	1.72E-07	0.588061	0.002
648385.45	4186531.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	3.87E-07	1.63E-07	0.562863	0.002
648405.45	4186531.83	0.001	0.000	0.000	0.007	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	3.72E-07	1.55E-07	0.539852	0.001
648425.45	4186531.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	3.58E-07	1.47E-07	0.518347	0.001
648445.45	4186531.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	3.46E-07	1.39E-07	0.498765	0.001
648465.45	4186531.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	3.35E-07	1.33E-07	0.481489	0.001
648485.45	4186531.83	0.001	0.000	0.000	0.006	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-08	3.25E-07	1.27E-07	0.466408	0.001
648505.45	4186531.83	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.43E-08	3.17E-07	1.22E-07	0.45322	0.001
648605.45	4186531.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.83E-07	1.00E-07	0.398827	0.001
648625.45	4186531.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-08	2.78E-07	9.62E-08	0.390159	0.001
648645.45	4186531.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-08	2.74E-07	9.27E-08	0.3824	0.001
648665.45	4186531.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.62E-08	2.70E-07	8.94E-08	0.375604	0.001
648685.45	4186531.83	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-08	2.66E-07	8.63E-08	0.369189	0.001
648705.45	4186531.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-08	2.63E-07	8.34E-08	0.36316	0.001
648245.45	4186551.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.24E-08	5.54E-07	2.56E-07	0.822674	0.002
648265.45	4186551.83	0.001	0.000	0.000	0.011	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-08	5.29E-07	2.42E-07	0.782627	0.002
648285.45	4186551.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-08	5.04E-07	2.28E-07	0.744022	0.002
648305.45	4186551.83	0.001	0.000	0.000	0.009	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	4.79E-07	2.14E-07	0.7059	0.002
648325.45	4186551.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	4.54E-07	2.01E-07	0.668221	0.002
648345.45	4186551.83	0.001	0.000	0.000	0.008	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.30E-08	4.32E-07	1.89E-07	0.633743	0.002
648365.45	4186551.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.32E-08	4.12E-07	1.77E-07	0.602745	0.002
648385.45	4186551.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	3.95E-07	1.68E-07	0.575393	0.002
648405.45	4186551.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	3.79E-07	1.58E-07	0.55054	0.001
648425.45	4186551.83	0.001	0.000	0.000	0.007	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	3.64E-07	1.50E-07	0.527536	0.001
648445.45	4186551.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	3.50E-07	1.42E-07	0.506627	0.001
648465.45	4186551.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	3.39E-07	1.36E-07	0.488024	0.001
648485.45	4186551.83	0.001	0.000	0.000	0.006	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-08	3.28E-07	1.30E-07	0.47186	0.001
648625.45	4186551.83	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.75E-07	9.67E-08	0.386975	0.001
648645.45	4186551.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-08	2.69E-07	9.31E-08	0.377957	0.001
648665.45	4186551.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	2.64E-07	8.97E-08	0.36949	0.001
648685.45	4186551.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-08	2.59E-07	8.66E-08	0.361284	0.001
648705.45	4186551.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	2.53E-07	8.37E-08	0.3529	0.001
648245.45	4186571.83	0.001	0.000	0.000	0.012	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-08	5.96E-07	2.78E-07	0.886122	0.003
648265.45	4186571.83	0.001	0.000	0.000	0.012	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-08	5.64E-07	2.60E-07	0.836847	0.002
648285.45	4186571.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	5.33E-07	2.44E-07	0.789566	0.002
648305.45	4186571.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	5.04E-07	2.27E-07	0.743963	0.002
648325.45	4186571.83	0.001	0.000	0.000	0.009	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.30E-08	4.75E-07	2.12E-07	0.699392	0.002
648345.45	4186571.83	0.001	0.000	0.000	0.009	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	4.48E-07	1.97E-07	0.658711	0.002
648365.45	4186571.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	4.25E-07	1.85E-07	0.623102	0.002
648385.45	4186571.83	0.001	0.000	0.000	0.008	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	4.05E-07	1.73E-07	0.592147	0.002
648405.45	4186571.83	0.001	0.000	0.000	0.007	0.003	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	3.87E-07	1.63E-07	0.564375	0.002
648425.45	4186571.83	0.001	0.000	0.000	0.007	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	3.71E-07	1.54E-07	0.539174	0.001
648445.45	4186571.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	3.57E-07	1.46E-07	0.516728	0.001
648465.45	4186571.83	0.001	0.000	0.000	0.006	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.40E-08	3.44E-07	1.39E-07	0.496856	0.001
648645.45	4186571.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.67E-07	9.36E-08	0.37626	0.001
648665.45	4186571.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.61E-07	9.01E-08	0.366686	0.001
648685.45	4186571.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.55E-07	8.69E-08	0.357502	0.001
648705.45	4186571.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.49E-07	8.39E-08	0.348522	0.001
648245.45	4186591.83	0.001	0.000	0.000	0.014	0.005	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-08	6.64E-07	3.15E-07	0.991568	0.003
648265.45	4186591.83	0.001	0.000	0.000	0.013	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	6.17E-07	2.89E-07	0.918955	0.003
648285.45	4186591.83	0.001	0.000	0.000	0.012	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	5.75E-07	2.66E-07	0.854663	0.002
648305.45	4186591.83	0.001	0.000	0.000	0.011	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.30E-08	5.38E-07	2.46E-07	0.796723	0.002
648325.45	4186591.83	0.001	0.000	0.000	0.010	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	5.02E-07	2.26E-07	0.741544	0.002
648345.45	4186591.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	4.70E-07	2.09E-07	0.692378	0.002
648365.45	4186591.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	4.43E-07	1.94E-07	0.650252	0.002
648385.45	4186591.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	4.20E-07	1.81E-07	0.614685	0.002
648405.45	4186591.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	3.99E-07	1.70E-07	0.582259	0.002
648425.45	4186591.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	3.81E-07	1.59E-07	0.554004	0.002
648445.45	4186591.83	0.001	0.000	0.000	0.007	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	3.65E-07	1.51E-07	0.529362	0.001
648465.45	4186591.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-08	3.51E-07	1.43E-07	0.507938	0.001
648605.45	4186591.83	0.001	0.000	0.000	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.50E-08	2.81E-07	1.02E-07	0.398519	0.001
648625.45	4186591.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-08	2.74E-07	9.82E-08	0.387082	0.001
648645.45	4186591.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-08	2.67E-07	9.43E-08	0.376469	0.001
648665.45	4186591.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.60E-07	9.06E-08	0.366155	0.001
648685.45	4186591.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.54E-07	8.72E-08	0.356447	0.001
648705.45	4186591.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.48E-07	8.41E-08	0.347123	0.001
648725.45	4186591.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.42E-07	8.11E-08	0.338371	0.001
648245.45	4186611.83	0.001	0.000	0.000	0.017	0.006	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-08	7.74E-07	3.73E-07	1.15937	0.003
648265.45	4186611.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	6.97E-07	3.31E-07	1.041167	0.003

648285.45	4186611.83	0.001	0.000	0.000	0.013	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	6.35E-07	2.98E-07	0.945885	0.003
648305.45	4186611.83	0.001	0.000	0.000	0.012	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.32E-08	5.84E-07	2.70E-07	0.866872	0.003
648325.45	4186611.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	5.38E-07	2.45E-07	0.796883	0.002
648345.45	4186611.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	4.98E-07	2.24E-07	0.73547	0.002
648365.45	4186611.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	4.65E-07	2.06E-07	0.68445	0.002
648385.45	4186611.83	0.001	0.000	0.000	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	4.38E-07	1.91E-07	0.642201	0.002
648405.45	4186611.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	4.13E-07	1.77E-07	0.604414	0.002
648425.45	4186611.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	3.93E-07	1.66E-07	0.572231	0.002
648445.45	4186611.83	0.001	0.000	0.000	0.007	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.40E-08	3.75E-07	1.56E-07	0.544912	0.001
648585.45	4186611.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.50E-08	2.92E-07	1.09E-07	0.415075	0.001
648605.45	4186611.83	0.001	0.000	0.000	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-08	2.83E-07	1.04E-07	0.401481	0.001
648625.45	4186611.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-08	2.75E-07	9.91E-08	0.389299	0.001
648645.45	4186611.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.68E-07	9.50E-08	0.377912	0.001
648665.45	4186611.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.61E-07	9.12E-08	0.366982	0.001
648685.45	4186611.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.54E-07	8.76E-08	0.356737	0.001
648705.45	4186611.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.48E-07	8.42E-08	0.347159	0.001
648725.45	4186611.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.42E-07	8.11E-08	0.338212	0.001
648265.45	4186631.83	0.001	0.000	0.000	0.018	0.007	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.31E-08	8.14E-07	3.94E-07	1.220822	0.004
648285.45	4186631.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.32E-08	7.16E-07	3.41E-07	1.070428	0.003
648305.45	4186631.83	0.001	0.000	0.000	0.013	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	6.42E-07	3.01E-07	0.956941	0.003
648325.45	4186631.83	0.001	0.000	0.000	0.012	0.005	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	5.83E-07	2.69E-07	0.865266	0.002
648345.45	4186631.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	5.33E-07	2.42E-07	0.788431	0.002
648365.45	4186631.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	4.92E-07	2.20E-07	0.725741	0.002
648385.45	4186631.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	4.59E-07	2.02E-07	0.674935	0.002
648405.45	4186631.83	0.001	0.000	0.000	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	4.30E-07	1.86E-07	0.630461	0.002
648425.45	4186631.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-08	4.07E-07	1.73E-07	0.594231	0.002
648445.45	4186631.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	3.87E-07	1.62E-07	0.563403	0.002
648585.45	4186631.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-08	2.95E-07	1.10E-07	0.419891	0.001
648605.45	4186631.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-08	2.85E-07	1.05E-07	0.405465	0.001
648625.45	4186631.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.77E-07	1.00E-07	0.392539	0.001
648645.45	4186631.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.69E-07	9.59E-08	0.380297	0.001
648665.45	4186631.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.62E-07	9.18E-08	0.368762	0.001
648685.45	4186631.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-08	2.55E-07	8.79E-08	0.357947	0.001
648705.45	4186631.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-08	2.48E-07	8.44E-08	0.348048	0.001
648725.45	4186631.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	2.42E-07	8.11E-08	0.338587	0.001
648265.45	4186651.83	0.001	0.000	0.000	0.022	0.008	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	9.94E-07	4.90E-07	1.497145	0.004
648285.45	4186651.83	0.001	0.000	0.000	0.018	0.007	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-08	8.29E-07	4.01E-07	1.24342	0.004
648305.45	4186651.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	7.16E-07	3.41E-07	1.070825	0.003
648325.45	4186651.83	0.001	0.000	0.000	0.013	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	6.36E-07	2.97E-07	0.946565	0.003
648345.45	4186651.83	0.001	0.000	0.000	0.012	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	5.75E-07	2.64E-07	0.852988	0.002
648365.45	4186651.83	0.001	0.000	0.000	0.011	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	5.25E-07	2.37E-07	0.775965	0.002
648385.45	4186651.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.40E-08	4.84E-07	2.15E-07	0.713352	0.002
648405.45	4186651.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-08	4.51E-07	1.97E-07	0.66198	0.002
648425.45	4186651.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	4.24E-07	1.82E-07	0.62013	0.002
648445.45	4186651.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-08	4.01E-07	1.70E-07	0.585238	0.002
648585.45	4186651.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	2.98E-07	1.12E-07	0.425701	0.001
648605.45	4186651.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	2.89E-07	1.07E-07	0.410522	0.001
648625.45	4186651.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-08	2.80E-07	1.02E-07	0.396663	0.001
648645.45	4186651.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	2.71E-07	9.68E-08	0.383508	0.001
648665.45	4186651.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	2.63E-07	9.24E-08	0.371238	0.001
648685.45	4186651.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-08	2.56E-07	8.84E-08	0.359849	0.001
648705.45	4186651.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	2.49E-07	8.46E-08	0.349411	0.001
648725.45	4186651.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	2.42E-07	8.10E-08	0.339275	0.001
648285.45	4186671.83	0.001	0.000	0.000	0.022	0.008	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-08	9.85E-07	4.85E-07	1.483074	0.004
648305.45	4186671.83	0.001	0.000	0.000	0.017	0.007	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	8.11E-07	3.92E-07	1.216564	0.004
648325.45	4186671.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-08	7.04E-07	3.34E-07	1.051418	0.003
648345.45	4186671.83	0.001	0.000	0.000	0.013	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	6.25E-07	2.91E-07	0.929673	0.003
648365.45	4186671.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.40E-08	5.64E-07	2.58E-07	0.835746	0.002
648385.45	4186671.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	5.15E-07	2.31E-07	0.759982	0.002
648405.45	4186671.83	0.001	0.000	0.000	0.009	0.004	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.43E-08	4.76E-07	2.10E-07	0.7001	0.002
648425.45	4186671.83	0.001	0.000	0.000	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-08	4.44E-07	1.93E-07	0.651166	0.002
648565.45	4186671.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-08	3.15E-07	1.21E-07	0.451237	0.001
648585.45	4186671.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-08	3.03E-07	1.14E-07	0.432775	0.001
648605.45	4186671.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	2.93E-07	1.08E-07	0.416669	0.001
648625.45	4186671.83	0.001	0.000	0.000	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-08	2.83E-07	1.03E-07	0.401627	0.001
648645.45	4186671.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	2.74E-07	9.79E-08	0.387404	0.001
648665.45	4186671.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-08	2.65E-07	9.32E-08	0.374281	0.001
648685.45	4186671.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-08	2.57E-07	8.89E-08	0.362297	0.001
648705.45	4186671.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-08	2.50E-07	8.48E-08	0.351067	0.001
648725.45	4186671.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-08	2.43E-07	8.10E-08	0.340301	0.001
648745.45	4186671.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.62E-08	2.37E-07	7.75E-08	0.330568	0.001
648305.45	4186691.83	0.001	0.000	0.000	0.021	0.008	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-08	9.48E-07	4.64E-07	1.426255	0.004
648325.45	4186691.83	0.001	0.000	0.000	0.017	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.40E-08	7.91E-07	3.80E-07	1.184167	0.003
648345.45	4186691.83	0.001	0.000	0.000	0.014	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-08	6.88E-07	3.24E-07	1.026385	0.003
648365.45	4186691.83	0.001	0.000	0.000	0.013	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	6.10E-07	2.82E-07	0.906765	0.003
648385.45	4186691.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-08	5.52E-07	2.51E-07	0.816938	0.002
648405.45	4186691.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-08	5.05E-07	2.26E-07	0.745445	0.002
648425.45	4186691.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.46E-08	4.68E-07	2.05E-07	0.687946	0.002
648565.45	4186691.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	3.21E-07	1.24E-07	0.460457	0.001
648585.45	4186691.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-08	3.08E-07	1.17E-07	0.440813	0.001
648605.45	4186691.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	2.97E-07	1.10E-07	0.423409	0.001
648625.45	4186691.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-08	2.87E-07	1.04E-07	0.406927	0.001
648645.45	4186691.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-08	2.77E-07	9.90E-08	0.391758	0.001
648665.45	4186691.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-08	2.68E-07	9.39E-08	0.377665	0.001
648685.45	4186691.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.62E-08	2.59E-07	8.93E-08	0.364945	0.001
648705.45	4186691.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-08	2.51E-07	8.50E-08	0.352744	0.001
648725.45	4186691.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	2.44E-07	8.09E-08	0.341561	0.001
648745.45	4186691.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-08	2.38E-07	7.72E-08	0.331333	0.001
648225.45	4186711.83	0.001	0.000	0.000	0.031	0.012	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-08	1.36E-06	6.86E-07	2.0578	0.006
648325.45	4186711.83	0.001	0.000	0.000	0.020	0.007	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.42E-08	9.09E-07	4.43E-07	1.365762	0.004
648345.45	4186711.83	0.001	0.000	0.000	0.016	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.43E-08	7.63E-07	3.64E-07	1.141626	0.003
648365.45	4186711.83	0.001	0.000	0.000	0.014	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-08	6.65E-07	3.11E-07	0.990609	0.003
648385.45	4186711.83	0.001	0.000	0.000	0.012	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.46E-08	5.93E-07	2.73E-07	0.880758	0.003
648405.45	4186711.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-08	5.39E-07	2.43E-07	0.797285	0.002
648425.45	4186711.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.48E-08	4.95E-07	2.19E-07	0.729549	0.002
648565.45	4186711.83	0.001	0.000	0.000	0.006	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	3.28E-07	1.27E-07	0.470365	0.001
648585.45	4186711.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-08	3.14E-07	1.19E-07	0.449417	0.001
648605.45	4186711.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-08	3.02E-07	1.12E-07	0.430322	0.001
648625.45	4186711.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.62E-08	2.90E-07	1.06E-07	0.412406	0.001
648645.45	4186711.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-08	2.80E-07	1.00E-07	0.396083	0.001
648665.45	4186711.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	2.70E-07	9.46E-08	0.38108	0.001

648685.45	4186711.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-08	2.61E-07	8.97E-08	0.367411	0.001
648705.45	4186711.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-08	2.53E-07	8.50E-08	0.354407	0.001
648725.45	4186711.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-08	2.45E-07	8.08E-08	0.342703	0.001
648745.45	4186711.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-08	2.38E-07	7.69E-08	0.332039	0.001
648345.45	4186731.83	0.001	0.000	0.000	0.019	0.007	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-08	8.70E-07	4.21E-07	1.306399	0.004
648365.45	4186731.83	0.001	0.000	0.000	0.016	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-08	7.36E-07	3.49E-07	1.098901	0.003
648385.45	4186731.83	0.001	0.000	0.000	0.013	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.48E-08	6.45E-07	3.00E-07	0.960295	0.003
648405.45	4186731.83	0.001	0.000	0.000	0.012	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-08	5.79E-07	2.64E-07	0.857791	0.002
648545.45	4186731.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-08	3.51E-07	1.39E-07	0.506721	0.001
648565.45	4186731.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-08	3.34E-07	1.30E-07	0.480477	0.001
648585.45	4186731.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-08	3.20E-07	1.22E-07	0.457785	0.001
648605.45	4186731.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	3.06E-07	1.14E-07	0.436887	0.001
648625.45	4186731.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-08	2.94E-07	1.07E-07	0.417556	0.001
648645.45	4186731.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-08	2.83E-07	1.01E-07	0.399945	0.001
648665.45	4186731.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-08	2.72E-07	9.51E-08	0.384117	0.001
648685.45	4186731.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-08	2.63E-07	8.98E-08	0.369435	0.001
648705.45	4186731.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	2.54E-07	8.49E-08	0.355804	0.001
648725.45	4186731.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.70E-08	2.46E-07	8.04E-08	0.343627	0.001
648745.45	4186731.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-08	2.39E-07	7.64E-08	0.332645	0.001
648365.45	4186751.83	0.001	0.000	0.000	0.018	0.007	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-08	8.37E-07	4.03E-07	1.254404	0.004
648385.45	4186751.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-08	7.15E-07	3.37E-07	1.066498	0.003
648405.45	4186751.83	0.001	0.000	0.000	0.013	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-08	6.27E-07	2.89E-07	0.930981	0.003
648425.45	4186751.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	5.64E-07	2.55E-07	0.833795	0.002
648545.45	4186751.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-08	3.59E-07	1.43E-07	0.518112	0.001
648565.45	4186751.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	3.41E-07	1.33E-07	0.490131	0.001
648585.45	4186751.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-08	3.25E-07	1.24E-07	0.465294	0.001
648605.45	4186751.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-08	3.10E-07	1.16E-07	0.442606	0.001
648625.45	4186751.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	2.97E-07	1.08E-07	0.421955	0.001
648645.45	4186751.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.70E-08	2.85E-07	1.01E-07	0.4031	0.001
648665.45	4186751.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-08	2.74E-07	9.52E-08	0.386245	0.001
648685.45	4186751.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-08	2.64E-07	8.95E-08	0.370699	0.001
648705.45	4186751.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-08	2.55E-07	8.45E-08	0.356665	0.001
648725.45	4186751.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.74E-08	2.47E-07	7.99E-08	0.344131	0.001
648745.45	4186751.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-08	2.40E-07	7.58E-08	0.332983	0.001
648765.45	4186751.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-08	2.33E-07	7.21E-08	0.322814	0.001
648365.45	4186771.83	0.001	0.000	0.000	0.022	0.008	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-08	9.86E-07	4.82E-07	1.483343	0.004
648385.45	4186771.83	0.001	0.000	0.000	0.017	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-08	8.03E-07	3.83E-07	1.201135	0.004
648405.45	4186771.83	0.001	0.000	0.000	0.014	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-08	6.88E-07	3.22E-07	1.025411	0.003
648425.45	4186771.83	0.001	0.000	0.000	0.012	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	6.08E-07	2.78E-07	0.902064	0.003
648525.45	4186771.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	3.90E-07	1.59E-07	0.565349	0.001
648545.45	4186771.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-08	3.67E-07	1.46E-07	0.529588	0.001
648565.45	4186771.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-08	3.47E-07	1.35E-07	0.499121	0.001
648585.45	4186771.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	3.29E-07	1.25E-07	0.47148	0.001
648605.45	4186771.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-08	3.13E-07	1.16E-07	0.44664	0.001
648625.45	4186771.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-08	2.99E-07	1.08E-07	0.424728	0.001
648645.45	4186771.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-08	2.86E-07	1.01E-07	0.405011	0.001
648665.45	4186771.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-08	2.75E-07	9.48E-08	0.387219	0.001
648685.45	4186771.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-08	2.65E-07	8.90E-08	0.371216	0.001
648705.45	4186771.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-08	2.55E-07	8.38E-08	0.356868	0.001
648725.45	4186771.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-08	2.47E-07	7.92E-08	0.344154	0.001
648745.45	4186771.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-08	2.40E-07	7.50E-08	0.332847	0.001
648765.45	4186771.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-08	2.33E-07	7.13E-08	0.322598	0.001
648385.45	4186791.83	0.001	0.000	0.000	0.020	0.008	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-08	9.36E-07	4.54E-07	1.40628	0.004
648405.45	4186791.83	0.001	0.000	0.000	0.016	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-08	7.70E-07	3.65E-07	1.150177	0.003
648425.45	4186791.83	0.001	0.000	0.000	0.014	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-08	6.60E-07	3.05E-07	0.981487	0.003
648445.45	4186791.83	0.001	0.000	0.000	0.012	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-08	5.81E-07	2.62E-07	0.859508	0.002
648525.45	4186791.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-08	4.01E-07	1.64E-07	0.581587	0.002
648545.45	4186791.83	0.001	0.000	0.000	0.007	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	3.75E-07	1.50E-07	0.541565	0.001
648565.45	4186791.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-08	3.53E-07	1.37E-07	0.506747	0.001
648585.45	4186791.83	0.001	0.000	0.000	0.006	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-08	3.33E-07	1.26E-07	0.475986	0.001
648605.45	4186791.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.74E-08	3.15E-07	1.16E-07	0.449381	0.001
648625.45	4186791.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-08	3.00E-07	1.08E-07	0.425928	0.001
648645.45	4186791.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-08	2.87E-07	1.01E-07	0.405441	0.001
648665.45	4186791.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-08	2.75E-07	9.39E-08	0.387004	0.001
648685.45	4186791.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-08	2.65E-07	8.80E-08	0.370736	0.001
648705.45	4186791.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-08	2.55E-07	8.28E-08	0.35634	0.001
648725.45	4186791.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.82E-08	2.47E-07	7.82E-08	0.343568	0.001
648745.45	4186791.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-08	2.40E-07	7.40E-08	0.332221	0.001
648765.45	4186791.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	2.33E-07	7.02E-08	0.322062	0.001
648405.45	4186811.83	0.001	0.000	0.000	0.019	0.007	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-08	8.67E-07	4.16E-07	1.29954	0.004
648425.45	4186811.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.62E-08	7.16E-07	3.35E-07	1.066865	0.003
648445.45	4186811.83	0.001	0.000	0.000	0.013	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	6.18E-07	2.81E-07	0.915435	0.003
648465.45	4186811.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-08	5.45E-07	2.42E-07	0.803081	0.002
648485.45	4186811.83	0.001	0.000	0.000	0.009	0.004	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-08	4.90E-07	2.12E-07	0.718231	0.002
648505.45	4186811.83	0.001	0.000	0.000	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	4.46E-07	1.88E-07	0.650803	0.002
648525.45	4186811.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-08	4.11E-07	1.68E-07	0.596462	0.002
648545.45	4186811.83	0.001	0.000	0.000	0.007	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-08	3.82E-07	1.52E-07	0.550996	0.001
648565.45	4186811.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-08	3.56E-07	1.38E-07	0.511944	0.001
648585.45	4186811.83	0.001	0.000	0.000	0.006	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-08	3.35E-07	1.26E-07	0.479113	0.001
648605.45	4186811.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-08	3.17E-07	1.16E-07	0.450591	0.001
648625.45	4186811.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-08	3.01E-07	1.07E-07	0.426032	0.001
648645.45	4186811.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-08	2.87E-07	9.95E-08	0.40472	0.001
648665.45	4186811.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-08	2.75E-07	9.26E-08	0.385693	0.001
648685.45	4186811.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	2.64E-07	8.67E-08	0.369253	0.001
648705.45	4186811.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-08	2.55E-07	8.15E-08	0.354966	0.001
648725.45	4186811.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-08	2.47E-07	7.69E-08	0.342309	0.001
648745.45	4186811.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-08	2.40E-07	7.27E-08	0.33108	0.001
648765.45	4186811.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-08	2.33E-07	6.90E-08	0.321105	0.001
648785.45	4186811.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-08	2.28E-07	6.57E-08	0.312234	0.001
648405.45	4186831.83	0.001	0.000	0.000	0.021	0.008	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-08	9.87E-07	4.79E-07	1.482682	0.004
648425.45	4186831.83	0.001	0.000	0.000	0.016	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-08	7.83E-07	3.69E-07	1.168727	0.003
648445.45	4186831.83	0.001	0.000	0.000	0.013	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-08	6.58E-07	3.02E-07	0.977507	0.003
648465.45	4186831.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	5.70E-07	2.54E-07	0.841775	0.002
648485.45	4186831.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-08	5.07E-07	2.20E-07	0.744169	0.002
648505.45	4186831.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-08	4.57E-07	1.93E-07	0.667286	0.002
648525.45	4186831.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-08	4.18E-07	1.71E-07	0.606877	0.002
648545.45	4186831.83	0.001	0.000	0.000	0.007	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-08	3.86E-07	1.53E-07	0.55731	0.001
648565.45	4186831.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-08	3.59E-07	1.39E-07	0.515697	0.001
648585.45	4186831.83	0.001	0.000	0.000	0.006	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-08	3.36E-07	1.26E-07	0.480343	0.001
648605.45	4186831.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-08	3.17E-07	1.15E-07	0.450359	0.001
648625.45	4186831.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	3.01E-07	1.06E-07	0.425007	0.001

648645.45	4186831.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-08	2.86E-07	9.80E-08	0.403037	0.001
648665.45	4186831.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-08	2.74E-07	9.10E-08	0.383747	0.001
648685.45	4186831.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-08	2.63E-07	8.51E-08	0.367374	0.001
648705.45	4186831.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-08	2.54E-07	7.99E-08	0.353139	0.001
648725.45	4186831.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-08	2.46E-07	7.53E-08	0.3406	0.001
648745.45	4186831.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-08	2.39E-07	7.12E-08	0.329426	0.001
648765.45	4186831.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-08	2.33E-07	6.76E-08	0.319637	0.001
648785.45	4186831.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-08	2.27E-07	6.43E-08	0.310982	0.001
648425.45	4186851.83	0.001	0.000	0.000	0.018	0.007	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-08	8.51E-07	4.05E-07	1.273336	0.004
648445.45	4186851.83	0.001	0.000	0.000	0.014	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-08	6.93E-07	3.20E-07	1.029735	0.003
648465.45	4186851.83	0.001	0.000	0.000	0.012	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.74E-08	5.92E-07	2.65E-07	0.873992	0.002
648485.45	4186851.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-08	5.22E-07	2.27E-07	0.766194	0.002
648505.45	4186851.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-08	4.66E-07	1.96E-07	0.680495	0.002
648525.45	4186851.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-08	4.23E-07	1.73E-07	0.614096	0.002
648545.45	4186851.83	0.001	0.000	0.000	0.007	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.82E-08	3.89E-07	1.53E-07	0.560383	0.001
648565.45	4186851.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	3.60E-07	1.38E-07	0.516172	0.001
648585.45	4186851.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-08	3.36E-07	1.24E-07	0.479121	0.001
648605.45	4186851.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-08	3.16E-07	1.13E-07	0.44836	0.001
648625.45	4186851.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-08	3.00E-07	1.04E-07	0.422633	0.001
648645.45	4186851.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-08	2.85E-07	9.60E-08	0.400183	0.001
648665.45	4186851.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-08	2.73E-07	8.92E-08	0.381234	0.001
648685.45	4186851.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-08	2.62E-07	8.33E-08	0.364963	0.001
648705.45	4186851.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-08	2.53E-07	7.82E-08	0.350959	0.001
648725.45	4186851.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-08	2.45E-07	7.36E-08	0.338459	0.001
648745.45	4186851.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-08	2.38E-07	6.96E-08	0.327472	0.001
648765.45	4186851.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-08	2.32E-07	6.60E-08	0.317827	0.001
648785.45	4186851.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-08	2.27E-07	6.28E-08	0.30942	0.001
648805.45	4186851.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-08	2.22E-07	5.99E-08	0.301894	0.001
648425.45	4186871.83	0.001	0.000	0.000	0.020	0.007	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.74E-08	9.19E-07	4.40E-07	1.375967	0.004
648445.45	4186871.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-08	7.25E-07	3.35E-07	1.077572	0.003
648465.45	4186871.83	0.001	0.000	0.000	0.012	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-08	6.11E-07	2.74E-07	0.902143	0.003
648485.45	4186871.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-08	5.33E-07	2.31E-07	0.78174	0.002
648505.45	4186871.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-08	4.72E-07	1.98E-07	0.687456	0.002
648525.45	4186871.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-08	4.25E-07	1.72E-07	0.615046	0.002
648545.45	4186871.83	0.001	0.000	0.000	0.007	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-08	3.88E-07	1.52E-07	0.558236	0.001
648565.45	4186871.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-08	3.59E-07	1.35E-07	0.512913	0.001
648585.45	4186871.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-08	3.34E-07	1.22E-07	0.475394	0.001
648605.45	4186871.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-08	3.14E-07	1.11E-07	0.444343	0.001
648625.45	4186871.83	0.001	0.000	0.000	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-08	2.98E-07	1.02E-07	0.418599	0.001
648645.45	4186871.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-08	2.83E-07	9.37E-08	0.396493	0.001
648665.45	4186871.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-08	2.71E-07	8.70E-08	0.37793	0.001
648685.45	4186871.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-08	2.61E-07	8.12E-08	0.36198	0.001
648705.45	4186871.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-08	2.52E-07	7.62E-08	0.348237	0.001
648725.45	4186871.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-08	2.44E-07	7.17E-08	0.335904	0.001
648745.45	4186871.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-08	2.37E-07	6.78E-08	0.325216	0.001
648765.45	4186871.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-08	2.31E-07	6.43E-08	0.31587	0.001
648785.45	4186871.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-08	2.26E-07	6.12E-08	0.307731	0.001
648805.45	4186871.83	0.001	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-08	2.21E-07	5.83E-08	0.300427	0.001
648445.45	4186891.83	0.001	0.000	0.000	0.016	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-08	7.52E-07	3.48E-07	1.11909	0.003
648465.45	4186891.83	0.001	0.000	0.000	0.012	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	6.25E-07	2.79E-07	0.923163	0.003
648485.45	4186891.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-08	5.37E-07	2.32E-07	0.787637	0.002
648505.45	4186891.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-08	4.72E-07	1.96E-07	0.686272	0.002
648525.45	4186891.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-08	4.22E-07	1.68E-07	0.609583	0.002
648545.45	4186891.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-08	3.84E-07	1.48E-07	0.550945	0.001
648565.45	4186891.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-08	3.54E-07	1.31E-07	0.505297	0.001
648585.45	4186891.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-08	3.30E-07	1.18E-07	0.468318	0.001
648605.45	4186891.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-08	3.11E-07	1.07E-07	0.437984	0.001
648625.45	4186891.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-08	2.94E-07	9.84E-08	0.412711	0.001
648645.45	4186891.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-08	2.81E-07	9.08E-08	0.391436	0.001
648665.45	4186891.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-08	2.69E-07	8.43E-08	0.373552	0.001
648685.45	4186891.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-08	2.59E-07	7.88E-08	0.35828	0.001
648705.45	4186891.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-08	2.50E-07	7.39E-08	0.344883	0.001
648725.45	4186891.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-08	2.43E-07	6.96E-08	0.33302	0.001
648745.45	4186891.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-08	2.36E-07	6.58E-08	0.322802	0.001
648765.45	4186891.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-08	2.31E-07	6.25E-08	0.313904	0.001
648785.45	4186891.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-08	2.26E-07	5.95E-08	0.306042	0.001
648805.45	4186891.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-08	2.21E-07	5.67E-08	0.299043	0.001
648825.45	4186891.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-08	2.17E-07	5.43E-08	0.292971	0.001
648445.45	4186911.83	0.001	0.000	0.000	0.016	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-08	7.71E-07	3.56E-07	1.14607	0.003
648465.45	4186911.83	0.001	0.000	0.000	0.012	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-08	6.28E-07	2.78E-07	0.92564	0.003
648485.45	4186911.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-08	5.34E-07	2.27E-07	0.779998	0.002
648505.45	4186911.83	0.001	0.000	0.000	0.008	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-08	4.66E-07	1.90E-07	0.676093	0.002
648525.45	4186911.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-08	4.15E-07	1.63E-07	0.597795	0.002
648545.45	4186911.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-08	3.77E-07	1.42E-07	0.539486	0.001
648565.45	4186911.83	0.001	0.000	0.000	0.006	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-08	3.48E-07	1.26E-07	0.494346	0.001
648585.45	4186911.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-08	3.25E-07	1.14E-07	0.458716	0.001
648605.45	4186911.83	0.001	0.000	0.000	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-08	3.06E-07	1.03E-07	0.429503	0.001
648625.45	4186911.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-08	2.90E-07	9.45E-08	0.405114	0.001
648645.45	4186911.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-08	2.77E-07	8.73E-08	0.384993	0.001
648665.45	4186911.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-08	2.66E-07	8.12E-08	0.368042	0.001
648685.45	4186911.83	0.001	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-08	2.57E-07	7.60E-08	0.353629	0.001
648705.45	4186911.83	0.001	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-08	2.48E-07	7.14E-08	0.340885	0.001
648725.45	4186911.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-08	2.41E-07	6.73E-08	0.329795	0.001
648745.45	4186911.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-08	2.35E-07	6.38E-08	0.320215	0.001
648765.45	4186911.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-08	2.30E-07	6.06E-08	0.311844	0.001
648785.45	4186911.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-08	2.25E-07	5.77E-08	0.304411	0.001
648805.45	4186911.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-08	2.21E-07	5.51E-08	0.297836	0.001
648825.45	4186911.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-08	2.17E-07	5.28E-08	0.292138	0.001
648445.45	4186931.83	0.001	0.000	0.000	0.016	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-08	7.72E-07	3.53E-07	1.144977	0.003
648465.45	4186931.83	0.001	0.000	0.000	0.012	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-08	6.19E-07	2.69E-07	0.908075	0.002
648485.45	4186931.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-08	5.22E-07	2.17E-07	0.759262	0.002
648505.45	4186931.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-08	4.55E-07	1.81E-07	0.656668	0.002
648525.45	4186931.83	0.001	0.000	0.000	0.007	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-08	4.06E-07	1.55E-07	0.580881	0.001
648545.45	4186931.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-08	3.69E-07	1.35E-07	0.524708	0.001
648565.45	4186931.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-08	3.41E-07	1.20E-07	0.481349	0.001
648585.45	4186931.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-08	3.18E-07	1.08E-07	0.44701	0.001
648605.45	4186931.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-08	3.00E-07	9.83E-08	0.419248	0.001
648625.45	4186931.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-08	2.85E-07	9.02E-08	0.396356	0.001
648645.45	4186931.83	0.001	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-08	2.73E-07	8.35E-08	0.377494	0.001
648665.45	4186931.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-08	2.63E-07	7.78E-08	0.3617	0.001
648685.45	4186931.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-08	2.54E-07	7.29E-08	0.348222	0.001

648705.45	4186931.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-08	2.46E-07	6.86E-08	0.336423	0.001
648725.45	4186931.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.17E-08	2.40E-07	6.49E-08	0.326279	0.001
648745.45	4186931.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-08	2.34E-07	6.16E-08	0.31744	0.001
648765.45	4186931.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-08	2.29E-07	5.86E-08	0.309679	0.001
648785.45	4186931.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-08	2.25E-07	5.59E-08	0.302753	0.001
648805.45	4186931.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.24E-08	2.21E-07	5.35E-08	0.296698	0.001
648825.45	4186931.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.26E-08	2.18E-07	5.13E-08	0.291456	0.001
648445.45	4186951.83	0.001	0.000	0.000	0.015	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-08	7.50E-07	3.34E-07	1.105412	0.003
648465.45	4186951.83	0.001	0.000	0.000	0.011	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-08	5.97E-07	2.52E-07	0.871188	0.002
648485.45	4186951.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-08	5.04E-07	2.03E-07	0.728045	0.002
648505.45	4186951.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-08	4.40E-07	1.69E-07	0.630374	0.002
648525.45	4186951.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-08	3.93E-07	1.45E-07	0.559079	0.001
648545.45	4186951.83	0.001	0.000	0.000	0.006	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-08	3.58E-07	1.27E-07	0.505863	0.001
648565.45	4186951.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-08	3.31E-07	1.13E-07	0.46492	0.001
648585.45	4186951.83	0.001	0.000	0.000	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-08	3.10E-07	1.02E-07	0.432946	0.001
648605.45	4186951.83	0.001	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-08	2.93E-07	9.29E-08	0.407611	0.001
648625.45	4186951.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.17E-08	2.80E-07	8.55E-08	0.386667	0.001
648645.45	4186951.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-08	2.68E-07	7.93E-08	0.369298	0.001
648665.45	4186951.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-08	2.59E-07	7.41E-08	0.354734	0.001
648685.45	4186951.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-08	2.51E-07	6.96E-08	0.342347	0.001
648705.45	4186951.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-08	2.44E-07	6.57E-08	0.331654	0.001
648725.45	4186951.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-08	2.38E-07	6.23E-08	0.32244	0.001
648745.45	4186951.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-08	2.33E-07	5.92E-08	0.314437	0.001
648765.45	4186951.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-08	2.28E-07	5.65E-08	0.307404	0.001
648785.45	4186951.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-08	2.24E-07	5.40E-08	0.301078	0.001
648805.45	4186951.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.30E-08	2.21E-07	5.18E-08	0.295594	0.001
648825.45	4186951.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-08	2.18E-07	4.97E-08	0.290844	0.001
648845.45	4186951.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-08	2.15E-07	4.78E-08	0.286608	0.000
648465.45	4186971.83	0.001	0.000	0.000	0.010	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.36E-08	5.69E-07	2.29E-07	0.82178	0.002
648485.45	4186971.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.31E-08	4.81E-07	1.85E-07	0.689287	0.002
648505.45	4186971.83	0.001	0.000	0.000	0.007	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.26E-08	4.22E-07	1.55E-07	0.599232	0.001
648525.45	4186971.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-08	3.78E-07	1.33E-07	0.53326	0.001
648545.45	4186971.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-08	3.45E-07	1.17E-07	0.484468	0.001
648565.45	4186971.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-08	3.20E-07	1.05E-07	0.447365	0.001
648585.45	4186971.83	0.002	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-08	3.01E-07	9.51E-08	0.418358	0.001
648605.45	4186971.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-08	2.86E-07	8.71E-08	0.395152	0.001
648625.45	4186971.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-08	2.73E-07	8.05E-08	0.376226	0.001
648645.45	4186971.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.24E-08	2.63E-07	7.49E-08	0.360523	0.001
648665.45	4186971.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.26E-08	2.55E-07	7.02E-08	0.347501	0.001
648685.45	4186971.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-08	2.47E-07	6.61E-08	0.336194	0.001
648705.45	4186971.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-08	2.41E-07	6.26E-08	0.326638	0.001
648725.45	4186971.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.30E-08	2.36E-07	5.95E-08	0.318371	0.001
648745.45	4186971.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.32E-08	2.31E-07	5.68E-08	0.311244	0.001
648765.45	4186971.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-08	2.27E-07	5.43E-08	0.304978	0.001
648785.45	4186971.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-08	2.24E-07	5.21E-08	0.299375	0.001
648805.45	4186971.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-08	2.21E-07	5.00E-08	0.294479	0.001
648825.45	4186971.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.40E-08	2.18E-07	4.81E-08	0.290226	0.000
648845.45	4186971.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-08	2.16E-07	4.63E-08	0.286461	0.000
648465.45	4186991.83	0.001	0.000	0.000	0.009	0.003	0.007	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.64E-08	5.40E-07	2.01E-07	0.767574	0.002
648485.45	4186991.83	0.001	0.000	0.000	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-08	4.58E-07	1.65E-07	0.647496	0.002
648505.45	4186991.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.39E-08	4.02E-07	1.40E-07	0.565382	0.001
648525.45	4186991.83	0.001	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-08	3.61E-07	1.21E-07	0.505849	0.001
648545.45	4186991.83	0.002	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-08	3.32E-07	1.08E-07	0.462359	0.001
648565.45	4186991.83	0.002	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-08	3.10E-07	9.70E-08	0.42934	0.001
648585.45	4186991.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-08	2.92E-07	8.84E-08	0.403432	0.001
648605.45	4186991.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-08	2.79E-07	8.14E-08	0.382809	0.001
648625.45	4186991.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-08	2.67E-07	7.55E-08	0.365926	0.001
648645.45	4186991.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.31E-08	2.58E-07	7.06E-08	0.351919	0.001
648665.45	4186991.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.32E-08	2.51E-07	6.63E-08	0.340269	0.001
648685.45	4186991.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.34E-08	2.44E-07	6.26E-08	0.330075	0.001
648705.45	4186991.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-08	2.39E-07	5.95E-08	0.32153	0.001
648725.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-08	2.34E-07	5.67E-08	0.31421	0.001
648745.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.39E-08	2.30E-07	5.42E-08	0.307963	0.001
648765.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.40E-08	2.26E-07	5.20E-08	0.302472	0.001
648785.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-08	2.23E-07	5.00E-08	0.297638	0.001
648805.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.45E-08	2.21E-07	4.81E-08	0.293341	0.000
648825.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.47E-08	2.19E-07	4.64E-08	0.289669	0.000
648845.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	2.17E-07	4.48E-08	0.286458	0.000
648865.45	4186991.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.53E-08	2.15E-07	4.33E-08	0.283689	0.000
648465.45	4187011.83	0.001	0.000	0.000	0.008	0.003	0.006	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.99E-08	5.16E-07	1.73E-07	0.71928	0.002
648485.45	4187011.83	0.001	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-08	4.34E-07	1.45E-07	0.605039	0.001
648505.45	4187011.83	0.002	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	3.81E-07	1.24E-07	0.530129	0.001
648525.45	4187011.83	0.002	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-08	3.44E-07	1.09E-07	0.478116	0.001
648545.45	4187011.83	0.002	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-08	3.18E-07	9.81E-08	0.440277	0.001
648565.45	4187011.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-08	2.99E-07	8.91E-08	0.411522	0.001
648585.45	4187011.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-08	2.84E-07	8.18E-08	0.388943	0.001
648605.45	4187011.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-08	2.72E-07	7.57E-08	0.370839	0.001
648625.45	4187011.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.36E-08	2.62E-07	7.06E-08	0.355966	0.001
648645.45	4187011.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-08	2.54E-07	6.62E-08	0.343611	0.001
648665.45	4187011.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.39E-08	2.47E-07	6.25E-08	0.333252	0.001
648685.45	4187011.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-08	2.41E-07	5.92E-08	0.324305	0.001
648705.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-08	2.36E-07	5.63E-08	0.316725	0.001
648725.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-08	2.32E-07	5.38E-08	0.31028	0.001
648745.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-08	2.29E-07	5.16E-08	0.304779	0.001
648765.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-08	2.26E-07	4.96E-08	0.299993	0.001
648785.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	2.23E-07	4.78E-08	0.29584	0.000
648805.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-08	2.21E-07	4.61E-08	0.292269	0.000
648825.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	2.19E-07	4.46E-08	0.289194	0.000
648845.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.58E-08	2.18E-07	4.32E-08	0.286555	0.000
648865.45	4187011.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.61E-08	2.16E-07	4.18E-08	0.28431	0.000
648465.45	4187031.83	0.002	0.000	0.000	0.006	0.002	0.005	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.08E-08	4.72E-07	1.47E-07	0.64955	0.001
648485.45	4187031.83	0.002	0.000	0.000	0.006	0.002	0.004	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	4.03E-07	1.26E-07	0.556358	0.001
648505.45	4187031.83	0.002	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.58E-08	3.58E-07	1.10E-07	0.49404	0.001
648525.45	4187031.83	0.002	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-08	3.27E-07	9.80E-08	0.45009	0.001
648545.45	4187031.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-08	3.05E-07	8.87E-08	0.41811	0.001
648565.45	4187031.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-08	2.88E-07	8.14E-08	0.393748	0.001
648585.45	4187031.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-08	2.75E-07	7.53E-08	0.374602	0.001
648605.45	4187031.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-08	2.65E-07	7.02E-08	0.359137	0.001
648625.45	4187031.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.43E-08	2.56E-07	6.58E-08	0.346369	0.001
648645.45	4187031.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-08	2.49E-07	6.20E-08	0.33568	0.001
648665.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-08	2.43E-07	5.87E-08	0.326642	0.001

648685.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-08	2.38E-07	5.58E-08	0.318931	0.001
648705.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	2.34E-07	5.32E-08	0.312326	0.001
648725.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-08	2.31E-07	5.10E-08	0.306678	0.001
648745.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.54E-08	2.28E-07	4.90E-08	0.301844	0.000
648765.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.56E-08	2.25E-07	4.72E-08	0.297697	0.000
648785.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.58E-08	2.23E-07	4.56E-08	0.294205	0.000
648805.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.61E-08	2.21E-07	4.41E-08	0.2913	0.000
648825.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.64E-08	2.20E-07	4.27E-08	0.288807	0.000
648845.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-08	2.19E-07	4.15E-08	0.286751	0.000
648865.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-08	2.18E-07	4.03E-08	0.285085	0.000
648885.45	4187031.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-08	2.17E-07	3.91E-08	0.283722	0.000
648465.45	4187051.83	0.002	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	3.12E-08	4.30E-07	1.23E-07	0.58362	0.001
648485.45	4187051.83	0.002	0.000	0.000	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	2.79E-08	3.72E-07	1.08E-07	0.508467	0.001
648505.45	4187051.83	0.002	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.63E-08	3.36E-07	9.67E-08	0.459106	0.001
648525.45	4187051.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	3.10E-07	8.74E-08	0.423315	0.001
648545.45	4187051.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	2.92E-07	7.99E-08	0.396706	0.001
648565.45	4187051.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-08	2.78E-07	7.40E-08	0.376511	0.001
648585.45	4187051.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-08	2.67E-07	6.90E-08	0.360682	0.001
648605.45	4187051.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-08	2.58E-07	6.48E-08	0.347854	0.001
648625.45	4187051.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	2.51E-07	6.11E-08	0.337203	0.001
648645.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-08	2.45E-07	5.79E-08	0.328219	0.001
648665.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.53E-08	2.40E-07	5.50E-08	0.320548	0.001
648685.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	2.36E-07	5.25E-08	0.313936	0.001
648705.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.57E-08	2.32E-07	5.02E-08	0.308258	0.001
648725.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.60E-08	2.29E-07	4.82E-08	0.303396	0.000
648745.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.62E-08	2.27E-07	4.64E-08	0.29927	0.000
648765.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.64E-08	2.25E-07	4.48E-08	0.295811	0.000
648785.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-08	2.23E-07	4.34E-08	0.292991	0.000
648805.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-08	2.22E-07	4.21E-08	0.290666	0.000
648825.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-08	2.21E-07	4.09E-08	0.288774	0.000
648845.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	2.20E-07	3.97E-08	0.287302	0.000
648865.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.79E-08	2.20E-07	3.87E-08	0.286172	0.000
648885.45	4187051.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.83E-08	2.19E-07	3.77E-08	0.285344	0.000
648465.45	4187071.83	0.002	0.000	0.000	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	3.18E-08	3.95E-07	1.03E-07	0.52884	0.001
648485.45	4187071.83	0.002	0.000	0.000	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	2.85E-08	3.47E-07	9.30E-08	0.468648	0.001
648505.45	4187071.83	0.002	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.69E-08	3.17E-07	8.49E-08	0.428926	0.001
648525.45	4187071.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.61E-08	2.96E-07	7.80E-08	0.400055	0.001
648545.45	4187071.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.57E-08	2.80E-07	7.21E-08	0.378199	0.001
648565.45	4187071.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	2.69E-07	6.73E-08	0.361432	0.001
648585.45	4187071.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	2.60E-07	6.32E-08	0.348391	0.001
648605.45	4187071.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.56E-08	2.52E-07	5.98E-08	0.337871	0.001
648625.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.57E-08	2.47E-07	5.67E-08	0.329126	0.001
648645.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.59E-08	2.42E-07	5.40E-08	0.321766	0.001
648665.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.61E-08	2.38E-07	5.16E-08	0.315473	0.001
648685.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.64E-08	2.34E-07	4.94E-08	0.310008	0.001
648705.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-08	2.31E-07	4.74E-08	0.305251	0.000
648725.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.68E-08	2.29E-07	4.56E-08	0.301133	0.000
648745.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.71E-08	2.27E-07	4.40E-08	0.297614	0.000
648765.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-08	2.25E-07	4.26E-08	0.294702	0.000
648785.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	2.23E-07	4.13E-08	0.292345	0.000
648805.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.79E-08	2.23E-07	4.01E-08	0.290553	0.000
648825.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.82E-08	2.22E-07	3.90E-08	0.289203	0.000
648845.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.86E-08	2.22E-07	3.80E-08	0.288272	0.000
648865.45	4187071.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.90E-08	2.22E-07	3.71E-08	0.287682	0.000
648885.45	4187071.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.94E-08	2.22E-07	3.62E-08	0.287382	0.000
648485.45	4187091.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	2.91E-08	3.25E-07	7.98E-08	0.4341	0.001
648505.45	4187091.83	0.002	0.000	0.000	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	3.01E-07	7.44E-08	0.402525	0.001
648525.45	4187091.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.68E-08	2.83E-07	6.95E-08	0.379684	0.001
648545.45	4187091.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.64E-08	2.71E-07	6.50E-08	0.361913	0.001
648565.45	4187091.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.62E-08	2.61E-07	6.11E-08	0.348035	0.001
648585.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.62E-08	2.53E-07	5.79E-08	0.337279	0.001
648605.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.63E-08	2.47E-07	5.51E-08	0.328783	0.001
648625.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.65E-08	2.43E-07	5.26E-08	0.321845	0.001
648645.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-08	2.39E-07	5.04E-08	0.316019	0.001
648665.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-08	2.36E-07	4.83E-08	0.311004	0.000
648685.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.72E-08	2.33E-07	4.64E-08	0.306663	0.000
648705.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	2.31E-07	4.47E-08	0.302835	0.000
648725.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-08	2.29E-07	4.32E-08	0.299476	0.000
648745.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.80E-08	2.27E-07	4.17E-08	0.296606	0.000
648765.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.83E-08	2.26E-07	4.04E-08	0.294237	0.000
648785.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.86E-08	2.25E-07	3.93E-08	0.292409	0.000
648805.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.89E-08	2.24E-07	3.82E-08	0.291091	0.000
648825.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.93E-08	2.24E-07	3.72E-08	0.290254	0.000
648845.45	4187091.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.97E-08	2.24E-07	3.64E-08	0.289825	0.000
648865.45	4187091.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.01E-08	2.24E-07	3.55E-08	0.289748	0.000
648885.45	4187091.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.05E-08	2.25E-07	3.47E-08	0.28993	0.000
648485.45	4187111.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	2.97E-08	3.08E-07	6.86E-08	0.406124	0.001
648505.45	4187111.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.82E-08	2.87E-07	6.52E-08	0.38029	0.001
648525.45	4187111.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	2.73E-07	6.19E-08	0.362127	0.001
648545.45	4187111.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.71E-08	2.62E-07	5.87E-08	0.348015	0.001
648565.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-08	2.54E-07	5.57E-08	0.336686	0.001
648585.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-08	2.48E-07	5.30E-08	0.327791	0.001
648605.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.71E-08	2.43E-07	5.07E-08	0.320928	0.001
648625.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-08	2.39E-07	4.87E-08	0.315517	0.000
648645.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	2.37E-07	4.69E-08	0.311089	0.000
648665.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	2.34E-07	4.52E-08	0.307317	0.000
648685.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.81E-08	2.32E-07	4.36E-08	0.304037	0.000
648705.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.84E-08	2.31E-07	4.22E-08	0.301112	0.000
648725.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.87E-08	2.29E-07	4.08E-08	0.298529	0.000
648745.45	4187111.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.90E-08	2.28E-07	3.96E-08	0.296306	0.000
648485.45	4187131.83	0.002	0.000	0.000	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	3.05E-08	2.95E-07	5.94E-08	0.384753	0.001
648505.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.90E-08	2.76E-07	5.73E-08	0.36253	0.001
648525.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.82E-08	2.64E-07	5.53E-08	0.347846	0.001
648545.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.79E-08	2.56E-07	5.31E-08	0.336666	0.001
648565.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	2.49E-07	5.08E-08	0.327578	0.001
648585.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	2.44E-07	4.87E-08	0.320261	0.000
648605.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.79E-08	2.40E-07	4.68E-08	0.314625	0.000
648625.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.82E-08	2.37E-07	4.51E-08	0.310396	0.000
648645.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.85E-08	2.35E-07	4.36E-08	0.307128	0.000
648665.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.88E-08	2.33E-07	4.23E-08	0.304468	0.000
648685.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.91E-08	2.32E-07	4.10E-08	0.302176	0.000

648705.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.94E-08	2.31E-07	3.98E-08	0.300146	0.000
648725.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.97E-08	2.30E-07	3.86E-08	0.298338	0.000
648745.45	4187131.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.01E-08	2.29E-07	3.75E-08	0.29679	0.000
648505.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.98E-08	2.69E-07	5.09E-08	0.349647	0.001
648525.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.91E-08	2.58E-07	4.96E-08	0.337001	0.001
648545.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.87E-08	2.51E-07	4.82E-08	0.327966	0.000
648565.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.86E-08	2.46E-07	4.65E-08	0.320717	0.000
648585.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.87E-08	2.41E-07	4.49E-08	0.314777	0.000
648605.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.89E-08	2.38E-07	4.33E-08	0.310121	0.000
648625.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.91E-08	2.36E-07	4.19E-08	0.30674	0.000
648645.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.94E-08	2.34E-07	4.07E-08	0.304357	0.000
648665.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.98E-08	2.33E-07	3.96E-08	0.302633	0.000
648685.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.01E-08	2.33E-07	3.85E-08	0.301238	0.000
648705.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.05E-08	2.32E-07	3.75E-08	0.300043	0.000
648725.45	4187151.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.09E-08	2.32E-07	3.65E-08	0.298986	0.000
648745.45	4187151.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.12E-08	2.31E-07	3.56E-08	0.29811	0.000
648765.45	4187151.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.16E-08	2.31E-07	3.47E-08	0.297481	0.000
648505.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.08E-08	2.65E-07	4.56E-08	0.34133	0.000
648525.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.00E-08	2.55E-07	4.49E-08	0.329513	0.000
648545.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.97E-08	2.48E-07	4.39E-08	0.321808	0.000
648565.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.96E-08	2.44E-07	4.29E-08	0.316003	0.000
648585.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.96E-08	2.40E-07	4.16E-08	0.311289	0.000
648605.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.98E-08	2.37E-07	4.03E-08	0.307524	0.000
648625.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.01E-08	2.36E-07	3.91E-08	0.304787	0.000
648645.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.05E-08	2.35E-07	3.80E-08	0.303043	0.000
648665.45	4187171.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.09E-08	2.34E-07	3.71E-08	0.302018	0.000
648685.45	4187171.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.13E-08	2.34E-07	3.62E-08	0.301396	0.000
648705.45	4187171.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.17E-08	2.34E-07	3.54E-08	0.300951	0.000
648725.45	4187171.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.21E-08	2.34E-07	3.46E-08	0.300605	0.000
648745.45	4187171.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.25E-08	2.34E-07	3.38E-08	0.300375	0.000
648765.45	4187171.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.29E-08	2.34E-07	3.30E-08	0.300358	0.000
648505.45	4187191.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.19E-08	2.64E-07	4.14E-08	0.337063	0.000
648525.45	4187191.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.10E-08	2.53E-07	4.09E-08	0.325086	0.000
648545.45	4187191.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.07E-08	2.47E-07	4.03E-08	0.317958	0.000
648565.45	4187191.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.06E-08	2.43E-07	3.96E-08	0.313157	0.000
648585.45	4187191.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.07E-08	2.40E-07	3.87E-08	0.309498	0.000
648605.45	4187191.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.09E-08	2.38E-07	3.77E-08	0.306618	0.000
648625.45	4187191.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.12E-08	2.37E-07	3.67E-08	0.304521	0.000
648645.45	4187191.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.16E-08	2.36E-07	3.58E-08	0.30328	0.000
648665.45	4187191.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.20E-08	2.36E-07	3.49E-08	0.302795	0.000
648685.45	4187191.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.25E-08	2.36E-07	3.42E-08	0.302793	0.000
648705.45	4187191.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.29E-08	2.37E-07	3.35E-08	0.303025	0.000
648725.45	4187191.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.34E-08	2.37E-07	3.28E-08	0.30334	0.000
648745.45	4187191.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.39E-08	2.38E-07	3.21E-08	0.303739	0.001
648765.45	4187191.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.43E-08	2.39E-07	3.15E-08	0.304331	0.001
648525.45	4187211.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.22E-08	2.54E-07	3.76E-08	0.323706	0.000
648545.45	4187211.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.18E-08	2.47E-07	3.72E-08	0.31642	0.000
648565.45	4187211.83	0.002	0.000	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.17E-08	2.44E-07	3.67E-08	0.312053	0.000
648585.45	4187211.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.18E-08	2.41E-07	3.62E-08	0.309182	0.000
648605.45	4187211.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.20E-08	2.40E-07	3.54E-08	0.307131	0.000
648625.45	4187211.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.24E-08	2.39E-07	3.46E-08	0.305735	0.000
648645.45	4187211.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.28E-08	2.38E-07	3.38E-08	0.305016	0.000
648665.45	4187211.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.33E-08	2.39E-07	3.30E-08	0.304991	0.000
648685.45	4187211.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.38E-08	2.39E-07	3.23E-08	0.305515	0.001
648705.45	4187211.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.43E-08	2.40E-07	3.17E-08	0.306342	0.001
648725.45	4187211.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.48E-08	2.41E-07	3.12E-08	0.307292	0.001
648745.45	4187211.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.54E-08	2.42E-07	3.06E-08	0.308328	0.001
648765.45	4187211.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.59E-08	2.44E-07	3.00E-08	0.309543	0.001
648785.45	4187211.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-08	2.45E-07	2.95E-08	0.311063	0.001
648525.45	4187231.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.36E-08	2.57E-07	3.49E-08	0.325513	0.001
648545.45	4187231.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.30E-08	2.50E-07	3.46E-08	0.317336	0.000
648565.45	4187231.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.29E-08	2.46E-07	3.43E-08	0.312851	0.000
648585.45	4187231.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.30E-08	2.43E-07	3.39E-08	0.310372	0.000
648605.45	4187231.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.33E-08	2.42E-07	3.34E-08	0.308962	0.000
648625.45	4187231.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.37E-08	2.42E-07	3.27E-08	0.308252	0.001
648645.45	4187231.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.41E-08	2.42E-07	3.20E-08	0.308122	0.001
648665.45	4187231.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.47E-08	2.43E-07	3.13E-08	0.308581	0.001
648685.45	4187231.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.53E-08	2.44E-07	3.07E-08	0.309586	0.001
648705.45	4187231.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.58E-08	2.45E-07	3.02E-08	0.310961	0.001
648725.45	4187231.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.64E-08	2.46E-07	2.97E-08	0.312527	0.001
648745.45	4187231.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-08	2.48E-07	2.92E-08	0.314216	0.001
648765.45	4187231.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-08	2.50E-07	2.87E-08	0.316099	0.001
648785.45	4187231.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.83E-08	2.52E-07	2.82E-08	0.318303	0.001
648805.45	4187231.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.90E-08	2.54E-07	2.78E-08	0.320927	0.001
648945.45	4187231.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.51E-08	2.77E-07	2.50E-08	0.347254	0.001
648525.45	4187251.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.51E-08	2.63E-07	3.26E-08	0.330376	0.001
648545.45	4187251.83	0.002	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.44E-08	2.54E-07	3.24E-08	0.320683	0.001
648565.45	4187251.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.43E-08	2.49E-07	3.21E-08	0.315677	0.001
648585.45	4187251.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.44E-08	2.47E-07	3.19E-08	0.313231	0.001
648605.45	4187251.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.47E-08	2.46E-07	3.15E-08	0.312234	0.001
648625.45	4187251.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.51E-08	2.46E-07	3.10E-08	0.312093	0.001
648645.45	4187251.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.56E-08	2.47E-07	3.05E-08	0.312563	0.001
648665.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-08	2.48E-07	2.98E-08	0.313563	0.001
648685.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-08	2.49E-07	2.93E-08	0.315054	0.001
648705.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-08	2.51E-07	2.88E-08	0.316955	0.001
648725.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.82E-08	2.53E-07	2.83E-08	0.319128	0.001
648745.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.89E-08	2.55E-07	2.79E-08	0.321495	0.001
648765.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.96E-08	2.57E-07	2.75E-08	0.32411	0.001
648785.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.03E-08	2.60E-07	2.71E-08	0.32708	0.001
648805.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.12E-08	2.63E-07	2.67E-08	0.330502	0.001
648825.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.21E-08	2.66E-07	2.63E-08	0.334358	0.001
648845.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.30E-08	2.70E-07	2.59E-08	0.338567	0.001
648865.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.40E-08	2.74E-07	2.55E-08	0.343025	0.001
648885.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.50E-08	2.78E-07	2.51E-08	0.347634	0.001
648905.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.60E-08	2.82E-07	2.47E-08	0.352304	0.001
648925.45	4187251.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.70E-08	2.86E-07	2.44E-08	0.356956	0.001
648945.45	4187251.83	0.003	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.80E-08	2.89E-07	2.41E-08	0.361433	0.001
648545.45	4187271.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.60E-08	2.60E-07	3.05E-08	0.326489	0.001
648565.45	4187271.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.57E-08	2.54E-07	3.03E-08	0.320548	0.001
648585.45	4187271.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.59E-08	2.52E-07	3.01E-08	0.317892	0.001
648605.45	4187271.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-08	2.51E-07	2.98E-08	0.317086	0.001

648625.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.66E-08	2.51E-07	2.95E-08	0.317392	0.001
648645.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-08	2.52E-07	2.90E-08	0.318424	0.001
648665.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-08	2.54E-07	2.85E-08	0.319999	0.001
648685.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.86E-08	2.55E-07	2.80E-08	0.322047	0.001
648705.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.94E-08	2.58E-07	2.75E-08	0.324491	0.001
648725.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.01E-08	2.60E-07	2.71E-08	0.327269	0.001
648745.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.09E-08	2.63E-07	2.67E-08	0.330333	0.001
648765.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.17E-08	2.66E-07	2.64E-08	0.333743	0.001
648785.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.26E-08	2.69E-07	2.60E-08	0.337584	0.001
648805.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.36E-08	2.73E-07	2.57E-08	0.341917	0.001
648825.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.46E-08	2.77E-07	2.53E-08	0.346704	0.001
648845.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.57E-08	2.81E-07	2.50E-08	0.351805	0.001
648865.45	4187271.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.68E-08	2.86E-07	2.46E-08	0.357104	0.001
648885.45	4187271.83	0.003	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.79E-08	2.90E-07	2.43E-08	0.362482	0.001
648905.45	4187271.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-08	2.95E-07	2.39E-08	0.367856	0.001
648925.45	4187271.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-08	2.99E-07	2.36E-08	0.373087	0.001
648945.45	4187271.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-08	3.04E-07	2.34E-08	0.378	0.001
648965.45	4187271.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-08	3.07E-07	2.31E-08	0.382415	0.001
648545.45	4187291.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-08	2.68E-07	2.89E-08	0.335009	0.001
648565.45	4187291.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-08	2.61E-07	2.88E-08	0.327643	0.001
648585.45	4187291.83	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-08	2.58E-07	2.86E-08	0.324459	0.001
648605.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-08	2.57E-07	2.84E-08	0.323647	0.001
648625.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.83E-08	2.58E-07	2.81E-08	0.324288	0.001
648645.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.90E-08	2.59E-07	2.78E-08	0.325837	0.001
648665.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.97E-08	2.61E-07	2.73E-08	0.328025	0.001
648685.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.06E-08	2.63E-07	2.69E-08	0.330701	0.001
648705.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.14E-08	2.66E-07	2.64E-08	0.333773	0.001
648725.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.23E-08	2.69E-07	2.60E-08	0.337202	0.001
648745.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.32E-08	2.72E-07	2.57E-08	0.341017	0.001
648765.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.42E-08	2.76E-07	2.53E-08	0.345293	0.001
648785.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.52E-08	2.80E-07	2.50E-08	0.350117	0.001
648805.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.63E-08	2.84E-07	2.47E-08	0.355504	0.001
648825.45	4187291.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-08	2.89E-07	2.44E-08	0.361348	0.001
648845.45	4187291.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.87E-08	2.95E-07	2.41E-08	0.367487	0.001
648865.45	4187291.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-08	3.00E-07	2.38E-08	0.373754	0.001
648885.45	4187291.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-08	3.05E-07	2.35E-08	0.38002	0.001
648905.45	4187291.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-08	3.10E-07	2.32E-08	0.38616	0.001
648925.45	4187291.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-08	3.15E-07	2.29E-08	0.392002	0.001
648945.45	4187291.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.47E-08	3.20E-07	2.27E-08	0.39733	0.001
648965.45	4187291.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.57E-08	3.24E-07	2.24E-08	0.401953	0.001
648565.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.94E-08	2.71E-07	2.74E-08	0.337476	0.001
648585.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.94E-08	2.67E-07	2.72E-08	0.33318	0.001
648605.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.97E-08	2.65E-07	2.71E-08	0.332098	0.001
648625.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.03E-08	2.66E-07	2.69E-08	0.332916	0.001
648645.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.10E-08	2.67E-07	2.66E-08	0.334944	0.001
648665.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.18E-08	2.70E-07	2.63E-08	0.337778	0.001
648685.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.27E-08	2.73E-07	2.59E-08	0.341193	0.001
648705.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.37E-08	2.76E-07	2.55E-08	0.345018	0.001
648725.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.48E-08	2.79E-07	2.50E-08	0.349249	0.001
648745.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.58E-08	2.83E-07	2.47E-08	0.353924	0.001
648765.45	4187311.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.69E-08	2.88E-07	2.44E-08	0.359181	0.001
648785.45	4187311.83	0.003	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-08	2.93E-07	2.41E-08	0.365122	0.001
648805.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.95E-08	2.98E-07	2.39E-08	0.371708	0.001
648825.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-08	3.04E-07	2.36E-08	0.378772	0.001
648845.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-08	3.10E-07	2.33E-08	0.386097	0.001
648865.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-08	3.17E-07	2.31E-08	0.393472	0.001
648885.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.51E-08	3.23E-07	2.28E-08	0.400745	0.001
648905.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.65E-08	3.29E-07	2.25E-08	0.407717	0.001
648925.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.77E-08	3.34E-07	2.23E-08	0.414167	0.001
648945.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.89E-08	3.39E-07	2.20E-08	0.41984	0.001
648965.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.98E-08	3.43E-07	2.18E-08	0.424539	0.001
648985.45	4187311.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.06E-08	3.46E-07	2.16E-08	0.428084	0.001
648565.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.17E-08	2.83E-07	2.61E-08	0.351022	0.001
648585.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.15E-08	2.77E-07	2.60E-08	0.344637	0.001
648605.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.18E-08	2.75E-07	2.59E-08	0.342779	0.001
648625.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.24E-08	2.75E-07	2.58E-08	0.343547	0.001
648645.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.32E-08	2.77E-07	2.56E-08	0.345964	0.001
648665.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.41E-08	2.80E-07	2.53E-08	0.349464	0.001
648685.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.52E-08	2.84E-07	2.50E-08	0.353718	0.001
648705.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.63E-08	2.88E-07	2.46E-08	0.358499	0.001
648725.45	4187331.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-08	2.92E-07	2.42E-08	0.363742	0.001
648745.45	4187331.83	0.003	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.88E-08	2.97E-07	2.39E-08	0.369513	0.001
648765.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-08	3.02E-07	2.35E-08	0.375962	0.001
648785.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-08	3.08E-07	2.33E-08	0.383206	0.001
648805.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-08	3.15E-07	2.30E-08	0.391183	0.001
648825.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.47E-08	3.22E-07	2.28E-08	0.399663	0.001
648845.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.64E-08	3.29E-07	2.26E-08	0.408352	0.001
648865.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.80E-08	3.37E-07	2.24E-08	0.417002	0.001
648885.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.96E-08	3.44E-07	2.21E-08	0.42536	0.001
648905.45	4187331.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.11E-08	3.50E-07	2.19E-08	0.4332	0.001
648925.45	4187331.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.24E-08	3.56E-07	2.17E-08	0.440193	0.001
648945.45	4187331.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.36E-08	3.61E-07	2.14E-08	0.44605	0.001
648965.45	4187331.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.45E-08	3.65E-07	2.12E-08	0.45061	0.001
648985.45	4187331.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.52E-08	3.68E-07	2.10E-08	0.453692	0.001
648565.45	4187351.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	4.45E-08	3.00E-07	2.50E-08	0.369604	0.001
648585.45	4187351.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.40E-08	2.91E-07	2.49E-08	0.359727	0.001
648605.45	4187351.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.42E-08	2.87E-07	2.48E-08	0.356259	0.001
648625.45	4187351.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.48E-08	2.87E-07	2.47E-08	0.356595	0.001
648645.45	4187351.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.57E-08	2.89E-07	2.46E-08	0.359239	0.001
648665.45	4187351.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.68E-08	2.92E-07	2.44E-08	0.363398	0.001
648685.45	4187351.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.80E-08	2.96E-07	2.41E-08	0.368596	0.001
648705.45	4187351.83	0.003	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.93E-08	3.01E-07	2.38E-08	0.374542	0.001
648725.45	4187351.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-08	3.07E-07	2.35E-08	0.381113	0.001
648745.45	4187351.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-08	3.13E-07	2.31E-08	0.388339	0.001
648765.45	4187351.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.39E-08	3.20E-07	2.28E-08	0.396331	0.001
648785.45	4187351.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.56E-08	3.27E-07	2.25E-08	0.405185	0.001
648805.45	4187351.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.74E-08	3.35E-07	2.23E-08	0.414812	0.001
648825.45	4187351.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.93E-08	3.44E-07	2.21E-08	0.424936	0.001
648845.45	4187351.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.12E-08	3.52E-07	2.19E-08	0.435209	0.001
648865.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.31E-08	3.60E-07	2.17E-08	0.445272	0.001
648885.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.49E-08	3.68E-07	2.15E-08	0.454805	0.001

648905.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.65E-08	3.76E-07	2.13E-08	0.463446	0.001
648925.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.79E-08	3.82E-07	2.11E-08	0.470811	0.001
648945.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.90E-08	3.87E-07	2.09E-08	0.476613	0.001
648965.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.99E-08	3.90E-07	2.07E-08	0.480669	0.001
648985.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.04E-08	3.92E-07	2.05E-08	0.482922	0.001
649005.45	4187351.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.06E-08	3.93E-07	2.03E-08	0.483445	0.001
648565.45	4187371.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.82E-08	3.24E-07	2.40E-08	0.396157	0.001
648585.45	4187371.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.71E-08	3.09E-07	2.39E-08	0.380138	0.001
648605.45	4187371.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.71E-08	3.03E-07	2.39E-08	0.373543	0.001
648625.45	4187371.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.76E-08	3.01E-07	2.38E-08	0.372733	0.001
648645.45	4187371.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.86E-08	3.03E-07	2.37E-08	0.375327	0.001
648665.45	4187371.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-08	3.07E-07	2.35E-08	0.380092	0.001
648685.45	4187371.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-08	3.12E-07	2.34E-08	0.386328	0.001
648705.45	4187371.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.28E-08	3.18E-07	2.31E-08	0.393666	0.001
648725.45	4187371.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.45E-08	3.25E-07	2.28E-08	0.401956	0.001
648745.45	4187371.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.63E-08	3.32E-07	2.25E-08	0.411128	0.001
648765.45	4187371.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.83E-08	3.41E-07	2.22E-08	0.421191	0.001
648785.45	4187371.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.04E-08	3.50E-07	2.19E-08	0.432123	0.001
648805.45	4187371.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.26E-08	3.60E-07	2.16E-08	0.44379	0.001
648825.45	4187371.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.48E-08	3.70E-07	2.14E-08	0.455871	0.001
648845.45	4187371.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.70E-08	3.80E-07	2.13E-08	0.467953	0.001
648865.45	4187371.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.92E-08	3.89E-07	2.11E-08	0.479574	0.001
648885.45	4187371.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.11E-08	3.98E-07	2.09E-08	0.49026	0.001
648905.45	4187371.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.29E-08	4.06E-07	2.07E-08	0.499513	0.001
648925.45	4187371.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.43E-08	4.12E-07	2.05E-08	0.506905	0.001
648945.45	4187371.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.53E-08	4.17E-07	2.03E-08	0.512175	0.001
648965.45	4187371.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.59E-08	4.19E-07	2.02E-08	0.515225	0.001
648985.45	4187371.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.62E-08	4.20E-07	2.00E-08	0.516127	0.001
649005.45	4187371.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.62E-08	4.19E-07	1.98E-08	0.515067	0.001
649025.45	4187371.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.58E-08	4.17E-07	1.96E-08	0.512275	0.001
648585.45	4187391.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-08	3.34E-07	2.31E-08	0.408396	0.001
648605.45	4187391.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-08	3.23E-07	2.30E-08	0.396216	0.001
648625.45	4187391.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-08	3.19E-07	2.29E-08	0.393055	0.001
648645.45	4187391.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-08	3.20E-07	2.28E-08	0.395094	0.001
648665.45	4187391.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.33E-08	3.24E-07	2.27E-08	0.400335	0.001
648685.45	4187391.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.50E-08	3.30E-07	2.26E-08	0.407672	0.001
648705.45	4187391.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.68E-08	3.37E-07	2.24E-08	0.416675	0.001
648725.45	4187391.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.89E-08	3.46E-07	2.22E-08	0.427175	0.001
648745.45	4187391.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.12E-08	3.56E-07	2.19E-08	0.438983	0.001
648765.45	4187391.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.37E-08	3.67E-07	2.16E-08	0.451837	0.001
648785.45	4187391.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.62E-08	3.78E-07	2.13E-08	0.465511	0.001
648805.45	4187391.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.89E-08	3.90E-07	2.11E-08	0.479754	0.001
648825.45	4187391.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.15E-08	4.02E-07	2.09E-08	0.494206	0.001
648845.45	4187391.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.41E-08	4.14E-07	2.07E-08	0.508365	0.001
648865.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.65E-08	4.25E-07	2.05E-08	0.52159	0.001
648885.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.86E-08	4.34E-07	2.04E-08	0.533232	0.001
648905.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.04E-08	4.42E-07	2.02E-08	0.54267	0.001
648925.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.17E-08	4.48E-07	2.00E-08	0.549492	0.001
648945.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.25E-08	4.51E-07	1.99E-08	0.553534	0.001
648965.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-08	4.52E-07	1.97E-08	0.554857	0.001
648985.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.28E-08	4.51E-07	1.95E-08	0.553695	0.001
649005.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.24E-08	4.49E-07	1.93E-08	0.550396	0.001
649025.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.16E-08	4.44E-07	1.92E-08	0.545296	0.001
649045.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.06E-08	4.39E-07	1.90E-08	0.538735	0.001
649065.45	4187391.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.94E-08	4.33E-07	1.88E-08	0.531025	0.001
648605.45	4187411.83	0.003	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.49E-08	3.50E-07	2.22E-08	0.427278	0.001
648625.45	4187411.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.50E-08	3.43E-07	2.21E-08	0.419721	0.001
648645.45	4187411.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.60E-08	3.42E-07	2.21E-08	0.420062	0.001
648665.45	4187411.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.75E-08	3.46E-07	2.20E-08	0.425331	0.001
648685.45	4187411.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.94E-08	3.53E-07	2.19E-08	0.433813	0.001
648705.45	4187411.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.16E-08	3.61E-07	2.18E-08	0.444833	0.001
648725.45	4187411.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.42E-08	3.72E-07	2.16E-08	0.458203	0.001
648745.45	4187411.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.71E-08	3.85E-07	2.14E-08	0.473548	0.001
648765.45	4187411.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.03E-08	3.99E-07	2.11E-08	0.490194	0.001
648785.45	4187411.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.35E-08	4.13E-07	2.09E-08	0.507511	0.001
648805.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.67E-08	4.28E-07	2.06E-08	0.52506	0.001
648825.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.99E-08	4.42E-07	2.04E-08	0.542407	0.001
648845.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.28E-08	4.56E-07	2.02E-08	0.558828	0.001
648865.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.55E-08	4.68E-07	2.00E-08	0.573508	0.001
648885.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.77E-08	4.78E-07	1.99E-08	0.585582	0.001
648905.45	4187411.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.93E-08	4.85E-07	1.97E-08	0.594404	0.001
648925.45	4187411.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.04E-08	4.90E-07	1.96E-08	0.599678	0.001
648945.45	4187411.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.08E-08	4.91E-07	1.94E-08	0.60147	0.001
648965.45	4187411.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.07E-08	4.90E-07	1.93E-08	0.600088	0.001
648985.45	4187411.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.02E-08	4.87E-07	1.91E-08	0.595987	0.001
649005.45	4187411.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.92E-08	4.82E-07	1.89E-08	0.589652	0.001
649025.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.80E-08	4.75E-07	1.87E-08	0.581556	0.001
649045.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.65E-08	4.67E-07	1.86E-08	0.572097	0.001
649065.45	4187411.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.48E-08	4.58E-07	1.84E-08	0.56166	0.001
648625.45	4187431.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.03E-08	3.75E-07	2.14E-08	0.456928	0.001
648645.45	4187431.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.09E-08	3.71E-07	2.13E-08	0.452945	0.001
648665.45	4187431.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.25E-08	3.73E-07	2.13E-08	0.457085	0.001
648685.45	4187431.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.48E-08	3.81E-07	2.12E-08	0.466597	0.001
648705.45	4187431.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.75E-08	3.91E-07	2.11E-08	0.480092	0.001
648725.45	4187431.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.08E-08	4.05E-07	2.10E-08	0.497271	0.001
648745.45	4187431.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.46E-08	4.22E-07	2.09E-08	0.517439	0.001
648765.45	4187431.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.86E-08	4.40E-07	2.07E-08	0.539258	0.001
648785.45	4187431.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-08	4.58E-07	2.05E-08	0.561423	0.001
648805.45	4187431.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.66E-08	4.76E-07	2.02E-08	0.583224	0.001
648825.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.04E-08	4.94E-07	2.00E-08	0.603951	0.001
648845.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.38E-08	5.09E-07	1.98E-08	0.62261	0.001
648865.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.66E-08	5.22E-07	1.96E-08	0.638115	0.001
648885.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.87E-08	5.31E-07	1.95E-08	0.649522	0.001
648905.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.00E-07	5.37E-07	1.93E-08	0.656359	0.001
648925.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.01E-07	5.39E-07	1.92E-08	0.658638	0.001
648945.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.00E-07	5.37E-07	1.90E-08	0.656778	0.001
648965.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.96E-08	5.33E-07	1.89E-08	0.651417	0.001
648985.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.83E-08	5.26E-07	1.87E-08	0.643268	0.001
649005.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.67E-08	5.18E-07	1.85E-08	0.632959	0.001
649025.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.48E-08	5.08E-07	1.84E-08	0.621086	0.001
649045.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.27E-08	4.97E-07	1.82E-08	0.608092	0.001

649065.45	4187431.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.05E-08	4.86E-07	1.80E-08	0.594412	0.001
648645.45	4187451.83	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.74E-08	4.10E-07	2.07E-08	0.498205	0.001
648665.45	4187451.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.89E-08	4.10E-07	2.07E-08	0.49929	0.001
648685.45	4187451.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.15E-08	4.17E-07	2.06E-08	0.509306	0.001
648705.45	4187451.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.50E-08	4.30E-07	2.06E-08	0.525716	0.001
648725.45	4187451.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.92E-08	4.48E-07	2.05E-08	0.54805	0.001
648745.45	4187451.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.42E-08	4.70E-07	2.04E-08	0.574999	0.001
648765.45	4187451.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.94E-08	4.94E-07	2.03E-08	0.603894	0.001
648785.45	4187451.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.46E-08	5.18E-07	2.01E-08	0.632518	0.001
648805.45	4187451.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.95E-08	5.40E-07	1.99E-08	0.659542	0.001
648825.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.04E-07	5.60E-07	1.97E-08	0.683848	0.002
648845.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.08E-07	5.77E-07	1.95E-08	0.704058	0.002
648865.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.10E-07	5.89E-07	1.93E-08	0.718902	0.002
648885.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.12E-07	5.97E-07	1.91E-08	0.727667	0.002
648905.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.13E-07	5.99E-07	1.90E-08	0.730336	0.002
648925.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.12E-07	5.96E-07	1.88E-08	0.727514	0.002
648945.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.11E-07	5.90E-07	1.87E-08	0.720142	0.002
648965.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.10E-07	5.81E-07	1.85E-08	0.709224	0.002
648985.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.07E-07	5.70E-07	1.83E-08	0.695698	0.002
649005.45	4187451.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.05E-07	5.57E-07	1.82E-08	0.680359	0.002
649025.45	4187451.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.02E-07	5.44E-07	1.80E-08	0.663839	0.002
649045.45	4187451.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.94E-08	5.29E-07	1.78E-08	0.646621	0.001
649065.45	4187451.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.66E-08	5.15E-07	1.77E-08	0.629129	0.001
649085.45	4187451.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.37E-08	5.00E-07	1.75E-08	0.611694	0.001
648685.45	4187471.83	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.04E-08	4.68E-07	2.01E-08	0.568302	0.001
648705.45	4187471.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.47E-08	4.83E-07	2.00E-08	0.58758	0.001
648725.45	4187471.83	0.006	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.04E-08	5.07E-07	2.00E-08	0.617123	0.001
648745.45	4187471.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.72E-08	5.37E-07	2.00E-08	0.653676	0.001
648765.45	4187471.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.04E-07	5.68E-07	1.99E-08	0.692349	0.002
648785.45	4187471.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.11E-07	5.99E-07	1.98E-08	0.729276	0.002
648805.45	4187471.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.17E-07	6.26E-07	1.96E-08	0.762168	0.002
648825.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.22E-07	6.48E-07	1.94E-08	0.789237	0.002
648845.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.25E-07	6.64E-07	1.92E-08	0.80885	0.002
648865.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-07	6.74E-07	1.90E-08	0.820045	0.002
648885.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-07	6.76E-07	1.88E-08	0.822827	0.002
648905.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-07	6.72E-07	1.87E-08	0.818118	0.002
648925.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-07	6.63E-07	1.85E-08	0.807361	0.002
648945.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-07	6.50E-07	1.84E-08	0.792105	0.002
648965.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.21E-07	6.35E-07	1.82E-08	0.773714	0.002
648985.45	4187471.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.17E-07	6.18E-07	1.80E-08	0.753318	0.002
649005.45	4187471.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.14E-07	6.00E-07	1.78E-08	0.731758	0.002
649025.45	4187471.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.10E-07	5.82E-07	1.77E-08	0.709662	0.002
649045.45	4187471.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.06E-07	5.64E-07	1.75E-08	0.687509	0.002
649065.45	4187471.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.03E-07	5.45E-07	1.73E-08	0.665674	0.002
649085.45	4187471.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.94E-08	5.28E-07	1.72E-08	0.644431	0.001
648725.45	4187491.83	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.06E-07	5.91E-07	1.96E-08	0.717317	0.002
648745.45	4187491.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.16E-07	6.32E-07	1.96E-08	0.767118	0.002
648765.45	4187491.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.25E-07	6.75E-07	1.96E-08	0.819169	0.002
648785.45	4187491.83	0.010	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.34E-07	7.13E-07	1.95E-08	0.865838	0.002
648805.45	4187491.83	0.010	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.40E-07	7.44E-07	1.94E-08	0.903509	0.002
648825.45	4187491.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-07	7.65E-07	1.92E-08	0.929957	0.002
648845.45	4187491.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.48E-07	7.77E-07	1.90E-08	0.944173	0.002
648865.45	4187491.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-07	7.79E-07	1.88E-08	0.946338	0.002
648885.45	4187491.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.48E-07	7.72E-07	1.86E-08	0.937978	0.002
648905.45	4187491.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-07	7.58E-07	1.84E-08	0.921376	0.002
648925.45	4187491.83	0.010	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-07	7.39E-07	1.83E-08	0.898999	0.002
648945.45	4187491.83	0.010	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-07	7.18E-07	1.81E-08	0.872989	0.002
648965.45	4187491.83	0.010	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-07	6.94E-07	1.79E-08	0.84493	0.002
648985.45	4187491.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-07	6.70E-07	1.77E-08	0.815971	0.002
649005.45	4187491.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-07	6.46E-07	1.76E-08	0.786907	0.002
649025.45	4187491.83	0.009	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.18E-07	6.22E-07	1.74E-08	0.758272	0.002
649045.45	4187491.83	0.008	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.14E-07	5.99E-07	1.72E-08	0.73045	0.002
649065.45	4187491.83	0.008	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.09E-07	5.77E-07	1.70E-08	0.703736	0.002
649085.45	4187491.83	0.008	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.05E-07	5.56E-07	1.69E-08	0.678321	0.002
648765.45	4187511.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	8.35E-07	1.94E-08	1.011142	0.002
648785.45	4187511.83	0.012	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-07	8.80E-07	1.94E-08	1.065969	0.002
648805.45	4187511.83	0.012	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-07	9.10E-07	1.93E-08	1.102256	0.003
648825.45	4187511.83	0.013	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-07	9.23E-07	1.91E-08	1.11939	0.003
648845.45	4187511.83	0.013	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-07	9.22E-07	1.89E-08	1.118754	0.003
648865.45	4187511.83	0.013	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-07	9.09E-07	1.87E-08	1.103037	0.003
648885.45	4187511.83	0.012	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-07	8.87E-07	1.85E-08	1.075992	0.003
648905.45	4187511.83	0.012	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-07	8.58E-07	1.83E-08	1.041533	0.002
648925.45	4187511.83	0.012	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-07	8.26E-07	1.80E-08	1.002993	0.002
648945.45	4187511.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-07	7.93E-07	1.79E-08	0.962831	0.002
648965.45	4187511.83	0.011	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.46E-07	7.59E-07	1.77E-08	0.922604	0.002
648985.45	4187511.83	0.010	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-07	7.26E-07	1.75E-08	0.883275	0.002
649005.45	4187511.83	0.010	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-07	6.95E-07	1.73E-08	0.845367	0.002
649025.45	4187511.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-07	6.65E-07	1.71E-08	0.809224	0.002
649045.45	4187511.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.21E-07	6.37E-07	1.69E-08	0.775057	0.002
649065.45	4187511.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.16E-07	6.10E-07	1.67E-08	0.742975	0.002
649085.45	4187511.83	0.008	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.11E-07	5.85E-07	1.66E-08	0.713034	0.002
648785.45	4187531.83	0.015	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.13E-06	1.94E-08	1.368294	0.003
648805.45	4187531.83	0.016	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.14E-06	1.93E-08	1.38386	0.003
648825.45	4187531.83	0.016	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.14E-06	1.92E-08	1.374932	0.003
648845.45	4187531.83	0.016	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.11E-06	1.89E-08	1.342911	0.003
648865.45	4187531.83	0.015	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.07E-06	1.87E-08	1.295636	0.003
648885.45	4187531.83	0.014	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.02E-06	1.84E-08	1.23947	0.003
648905.45	4187531.83	0.014	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-07	9.73E-07	1.81E-08	1.179487	0.003
648925.45	4187531.83	0.013	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-07	9.23E-07	1.79E-08	1.119342	0.003
648945.45	4187531.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-07	8.75E-07	1.77E-08	1.061206	0.003
648965.45	4187531.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-07	8.29E-07	1.74E-08	1.006116	0.002
648985.45	4187531.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-07	7.86E-07	1.72E-08	0.954495	0.002
649005.45	4187531.83	0.010	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.43E-07	7.46E-07	1.70E-08	0.906439	0.002
649025.45	4187531.83	0.010	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-07	7.09E-07	1.69E-08	0.861896	0.002
649045.45	4187531.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-07	6.75E-07	1.67E-08	0.820776	0.002
649065.45	4187531.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-07	6.44E-07	1.65E-08	0.782955	0.002
649085.45	4187531.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.17E-07	6.15E-07	1.63E-08	0.74824	0.002
649105.45	4187531.83	0.008	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.12E-07	5.88E-07	1.61E-08	0.71643	0.002
648825.45	4187551.83	0.020	0.003	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-07	1.42E-06	1.93E-08	1.720148	0.004
648845.45	4187551.83	0.019	0.003	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.62E-07	1.35E-06	1.90E-08	1.628628	0.004
648865.45	4187551.83	0.018	0.003	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-07	1.27E-06	1.87E-08	1.529757	0.004

648885.45	4187551.83	0.017	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.30E-07	1.18E-06	1.84E-08	1.430359	0.003
648905.45	4187551.83	0.016	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.10E-06	1.81E-08	1.335426	0.003
648925.45	4187551.83	0.015	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.03E-06	1.78E-08	1.247409	0.003
648945.45	4187551.83	0.014	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-07	9.63E-07	1.75E-08	1.167133	0.003
648965.45	4187551.83	0.013	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-07	9.03E-07	1.73E-08	1.094382	0.003
648985.45	4187551.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-07	8.48E-07	1.70E-08	1.028658	0.002
649005.45	4187551.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	7.98E-07	1.68E-08	0.969243	0.002
649025.45	4187551.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-07	7.54E-07	1.66E-08	0.91554	0.002
649045.45	4187551.83	0.010	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-07	7.14E-07	1.64E-08	0.867051	0.002
649065.45	4187551.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.30E-07	6.77E-07	1.62E-08	0.823233	0.002
649085.45	4187551.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-07	6.44E-07	1.60E-08	0.783601	0.002
649105.45	4187551.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.17E-07	6.15E-07	1.59E-08	0.747704	0.002
648865.45	4187571.83	0.021	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.92E-07	1.50E-06	1.88E-08	1.809875	0.004
648885.45	4187571.83	0.019	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-07	1.36E-06	1.84E-08	1.648598	0.004
648905.45	4187571.83	0.018	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.43E-07	1.25E-06	1.80E-08	1.508691	0.004
648925.45	4187571.83	0.016	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.15E-06	1.77E-08	1.385842	0.003
648945.45	4187571.83	0.015	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.06E-06	1.74E-08	1.279291	0.003
648965.45	4187571.83	0.014	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	9.79E-07	1.71E-08	1.186268	0.003
648985.45	4187571.83	0.013	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-07	9.12E-07	1.68E-08	1.10473	0.003
649005.45	4187571.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-07	8.52E-07	1.66E-08	1.032982	0.002
649025.45	4187571.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	7.99E-07	1.64E-08	0.969598	0.002
649045.45	4187571.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.45E-07	7.52E-07	1.62E-08	0.913401	0.002
649065.45	4187571.83	0.010	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-07	7.11E-07	1.60E-08	0.863452	0.002
649085.45	4187571.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-07	6.74E-07	1.58E-08	0.818855	0.002
649105.45	4187571.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-07	6.41E-07	1.56E-08	0.778827	0.002
648905.45	4187591.83	0.020	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.74E-07	1.41E-06	1.80E-08	1.700276	0.004
648925.45	4187591.83	0.018	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.47E-07	1.27E-06	1.76E-08	1.534952	0.004
648945.45	4187591.83	0.016	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.24E-07	1.16E-06	1.73E-08	1.396983	0.003
648965.45	4187591.83	0.015	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.06E-06	1.69E-08	1.281059	0.003
648985.45	4187591.83	0.014	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	9.77E-07	1.67E-08	1.182184	0.003
649005.45	4187591.83	0.013	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-07	9.06E-07	1.64E-08	1.097251	0.003
649025.45	4187591.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-07	8.45E-07	1.62E-08	1.023729	0.002
649045.45	4187591.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-07	7.91E-07	1.60E-08	0.959683	0.002
649065.45	4187591.83	0.010	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.43E-07	7.45E-07	1.58E-08	0.903509	0.002
649085.45	4187591.83	0.010	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-07	7.03E-07	1.56E-08	0.853799	0.002
649105.45	4187591.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.28E-07	6.67E-07	1.54E-08	0.809903	0.002
649125.45	4187591.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.21E-07	6.34E-07	1.52E-08	0.770483	0.002
648945.45	4187611.83	0.017	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-07	1.26E-06	1.72E-08	1.522955	0.004
648965.45	4187611.83	0.016	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.14E-06	1.68E-08	1.38012	0.003
648985.45	4187611.83	0.015	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.04E-06	1.65E-08	1.261811	0.003
649005.45	4187611.83	0.013	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-07	9.61E-07	1.62E-08	1.162539	0.003
649025.45	4187611.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-07	8.91E-07	1.60E-08	1.078319	0.003
649045.45	4187611.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-07	8.30E-07	1.58E-08	1.006135	0.002
649065.45	4187611.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.50E-07	7.78E-07	1.56E-08	0.943563	0.002
649085.45	4187611.83	0.010	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-07	7.33E-07	1.54E-08	0.888828	0.002
649105.45	4187611.83	0.010	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-07	6.93E-07	1.52E-08	0.840771	0.002
649125.45	4187611.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.26E-07	6.57E-07	1.50E-08	0.797941	0.002
648985.45	4187631.83	0.015	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.12E-06	1.64E-08	1.347736	0.003
649005.45	4187631.83	0.014	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-07	1.02E-06	1.61E-08	1.231632	0.003
649025.45	4187631.83	0.013	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-07	9.39E-07	1.58E-08	1.135259	0.003
649045.45	4187631.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-07	8.71E-07	1.56E-08	1.053955	0.002
649065.45	4187631.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	8.13E-07	1.54E-08	0.984569	0.002
649085.45	4187631.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.46E-07	7.63E-07	1.52E-08	0.924666	0.002
649105.45	4187631.83	0.010	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.38E-07	7.19E-07	1.50E-08	0.871933	0.002
649125.45	4187631.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.30E-07	6.81E-07	1.48E-08	0.825785	0.002
649025.45	4187651.83	0.013	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	9.94E-07	1.56E-08	1.19974	0.003
649045.45	4187651.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-07	9.16E-07	1.54E-08	1.106752	0.003
649065.45	4187651.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-07	8.51E-07	1.52E-08	1.029082	0.002
649085.45	4187651.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-07	7.95E-07	1.50E-08	0.961824	0.002
649105.45	4187651.83	0.010	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.43E-07	7.47E-07	1.48E-08	0.904532	0.002
649125.45	4187651.83	0.010	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.35E-07	7.05E-07	1.46E-08	0.854182	0.002
649065.45	4187671.83	0.012	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.70E-07	8.97E-07	1.50E-08	1.08213	0.003
649085.45	4187671.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-07	8.32E-07	1.48E-08	1.00518	0.002
649105.45	4187671.83	0.011	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.48E-07	7.78E-07	1.46E-08	0.940885	0.002
649125.45	4187671.83	0.010	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.39E-07	7.31E-07	1.44E-08	0.885004	0.002
649145.45	4187671.83	0.009	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.32E-07	6.90E-07	1.43E-08	0.836106	0.002
649105.45	4187691.83	0.011	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	8.18E-07	1.44E-08	0.986536	0.002
649125.45	4187691.83	0.010	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.44E-07	7.63E-07	1.43E-08	0.921779	0.002
649145.45	4187691.83	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.36E-07	7.17E-07	1.41E-08	0.866565	0.002
649145.45	4187711.83	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.41E-07	7.51E-07	1.39E-08	0.905814	0.002
649748.61	4182643.03	0.000	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-09	1.96E-07	1.74E-07	0.372874	0.002
647522.75	4185259.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.99E-09	1.67E-07	5.74E-08	0.229387	0.001
647542.75	4185259.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	1.71E-07	5.91E-08	0.235318	0.001
647562.75	4185259.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	1.76E-07	6.09E-08	0.241565	0.001
647582.75	4185259.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.80E-07	6.28E-08	0.248067	0.001
647602.75	4185259.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.85E-07	6.48E-08	0.254752	0.001
647622.75	4185259.9	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.90E-07	6.67E-08	0.261567	0.001
647642.75	4185259.9	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.95E-07	6.87E-08	0.268483	0.001
647522.75	4185279.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.70E-07	5.92E-08	0.234346	0.001
647542.75	4185279.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.75E-07	6.10E-08	0.240641	0.001
647562.75	4185279.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.79E-07	6.30E-08	0.247284	0.001
647582.75	4185279.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.84E-07	6.50E-08	0.254166	0.001
647602.75	4185279.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.89E-07	6.71E-08	0.261243	0.001
647622.75	4185279.9	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.94E-07	6.92E-08	0.268506	0.001
647642.75	4185279.9	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.99E-07	7.14E-08	0.275939	0.001
647522.75	4185299.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.74E-07	6.11E-08	0.239912	0.001
647542.75	4185299.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.78E-07	6.31E-08	0.246576	0.001
647562.75	4185299.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.83E-07	6.52E-08	0.253619	0.001
647582.75	4185299.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.88E-07	6.74E-08	0.260965	0.001
647602.75	4185299.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.94E-07	6.97E-08	0.268556	0.001
647622.75	4185299.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.99E-07	7.21E-08	0.276416	0.001
647642.75	4185299.9	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	2.05E-07	7.45E-08	0.284504	0.001
647502.75	4185319.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.73E-07	6.14E-08	0.239665	0.001
647522.75	4185319.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.78E-07	6.34E-08	0.246342	0.001
647542.75	4185319.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.83E-07	6.56E-08	0.253517	0.001
647562.75	4185319.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.88E-07	6.79E-08	0.261173	0.001
647582.75	4185319.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.94E-07	7.04E-08	0.269188	0.001
647602.75	4185319.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.99E-07	7.29E-08	0.277469	0.001
647622.75	4185319.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	2.05E-07	7.55E-08	0.285972	0.001
647642.75	4185319.9	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	2.11E-07	7.81E-08	0.294567	0.001
647482.75	4185339.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.73E-07	6.19E-08	0.2399	0.001

647502.75	4185339.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.77E-07	6.38E-08	0.246364	0.001
647522.75	4185339.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.82E-07	6.60E-08	0.253622	0.001
647542.75	4185339.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.88E-07	6.84E-08	0.261439	0.001
647562.75	4185339.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.94E-07	7.09E-08	0.269673	0.001
647582.75	4185339.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.99E-07	7.36E-08	0.278311	0.001
647602.75	4185339.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	2.06E-07	7.64E-08	0.287305	0.001
647622.75	4185339.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	2.12E-07	7.93E-08	0.296559	0.001
647642.75	4185339.9	0.000	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	2.19E-07	8.22E-08	0.306044	0.001
647442.75	4185359.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.69E-07	6.08E-08	0.234902	0.001
647462.75	4185359.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.73E-07	6.26E-08	0.240896	0.001
647482.75	4185359.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.78E-07	6.45E-08	0.247214	0.001
647502.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.82E-07	6.66E-08	0.254143	0.001
647522.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.88E-07	6.90E-08	0.261973	0.001
647542.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.94E-07	7.16E-08	0.270464	0.001
647562.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	2.00E-07	7.44E-08	0.279416	0.001
647582.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	2.06E-07	7.74E-08	0.288832	0.001
647602.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	2.13E-07	8.04E-08	0.298552	0.001
647622.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.28E-09	2.20E-07	8.35E-08	0.3085	0.001
647642.75	4185359.9	0.000	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.30E-09	2.27E-07	8.68E-08	0.318928	0.001
647402.75	4185379.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.65E-07	5.94E-08	0.22941	0.001
647422.75	4185379.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.69E-07	6.14E-08	0.23577	0.001
647442.75	4185379.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.74E-07	6.33E-08	0.242197	0.001
647462.75	4185379.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.78E-07	6.53E-08	0.248784	0.001
647482.75	4185379.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.83E-07	6.74E-08	0.255658	0.001
647502.75	4185379.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.88E-07	6.97E-08	0.26304	0.001
647522.75	4185379.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.94E-07	7.25E-08	0.271804	0.001
647542.75	4185379.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	2.00E-07	7.53E-08	0.280849	0.001
647562.75	4185379.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	2.06E-07	7.80E-08	0.289454	0.001
647582.75	4185379.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	2.12E-07	8.09E-08	0.298304	0.001
647262.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-09	1.40E-07	4.84E-08	0.192908	0.001
647282.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.93E-09	1.43E-07	5.01E-08	0.198249	0.001
647302.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.95E-09	1.47E-07	5.18E-08	0.203794	0.001
647322.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	1.51E-07	5.35E-08	0.209529	0.001
647342.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	1.55E-07	5.54E-08	0.215585	0.001
647362.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	1.60E-07	5.74E-08	0.222071	0.001
647382.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.64E-07	5.96E-08	0.228956	0.001
647402.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.69E-07	6.18E-08	0.236049	0.001
647422.75	4185399.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.74E-07	6.40E-08	0.243185	0.001
647442.75	4185399.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.79E-07	6.62E-08	0.250377	0.001
647462.75	4185399.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.84E-07	6.85E-08	0.257787	0.001
647482.75	4185399.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.89E-07	7.09E-08	0.265497	0.001
647502.75	4185399.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	1.95E-07	7.35E-08	0.273679	0.001
647522.75	4185399.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	2.00E-07	7.60E-08	0.281685	0.001
647222.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.88E-09	1.35E-07	4.69E-08	0.187177	0.001
647242.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.91E-09	1.39E-07	4.83E-08	0.191907	0.001
647262.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.93E-09	1.42E-07	4.99E-08	0.197086	0.001
647282.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	1.46E-07	5.16E-08	0.202514	0.001
647302.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	1.50E-07	5.33E-08	0.20822	0.001
647322.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	1.54E-07	5.51E-08	0.214148	0.001
647342.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.04E-09	1.58E-07	5.71E-08	0.220402	0.001
647362.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.63E-07	5.93E-08	0.227346	0.001
647382.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.68E-07	6.16E-08	0.234843	0.001
647402.75	4185419.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.73E-07	6.39E-08	0.241935	0.001
647422.75	4185419.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.79E-07	6.67E-08	0.250892	0.001
647442.75	4185419.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.85E-07	6.94E-08	0.259383	0.001
647462.75	4185419.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.91E-07	7.22E-08	0.268119	0.001
647482.75	4185419.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	1.97E-07	7.49E-08	0.276701	0.001
647502.75	4185419.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	2.01E-07	7.71E-08	0.283392	0.001
647202.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.89E-09	1.35E-07	4.69E-08	0.186645	0.001
647222.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.92E-09	1.38E-07	4.83E-08	0.191332	0.001
647242.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	1.42E-07	4.98E-08	0.196362	0.001
647262.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.97E-09	1.45E-07	5.16E-08	0.201886	0.001
647282.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.99E-09	1.49E-07	5.34E-08	0.207673	0.001
647302.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.53E-07	5.52E-08	0.213511	0.001
647322.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.04E-09	1.57E-07	5.70E-08	0.21951	0.001
647342.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.62E-07	5.90E-08	0.225826	0.001
647362.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.67E-07	6.13E-08	0.233151	0.001
647382.75	4185439.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.72E-07	6.37E-08	0.240567	0.001
647402.75	4185439.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.77E-07	6.60E-08	0.247732	0.001
647422.75	4185439.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.83E-07	6.90E-08	0.25709	0.001
647442.75	4185439.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.91E-07	7.28E-08	0.268914	0.001
647462.75	4185439.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	1.97E-07	7.58E-08	0.278338	0.001
647182.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-09	1.34E-07	4.66E-08	0.185422	0.001
647202.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.92E-09	1.37E-07	4.81E-08	0.190218	0.001
647222.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.95E-09	1.41E-07	4.97E-08	0.195312	0.001
647242.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.97E-09	1.44E-07	5.14E-08	0.200728	0.001
647262.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	1.49E-07	5.33E-08	0.206754	0.001
647282.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	1.53E-07	5.53E-08	0.213248	0.001
647302.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.57E-07	5.73E-08	0.219693	0.001
647322.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.62E-07	5.93E-08	0.22605	0.001
647342.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.66E-07	6.14E-08	0.232431	0.001
647362.75	4185459.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.71E-07	6.36E-08	0.239494	0.001
647382.75	4185459.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.77E-07	6.64E-08	0.248116	0.001
647402.75	4185459.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.82E-07	6.89E-08	0.25565	0.001
647422.75	4185459.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.87E-07	7.15E-08	0.263629	0.001
647442.75	4185459.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.96E-07	7.55E-08	0.276281	0.001
647022.75	4185479.9	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.72E-09	1.13E-07	3.76E-08	0.155394	0.000
647042.75	4185479.9	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-09	1.15E-07	3.86E-08	0.158604	0.000
647062.75	4185479.9	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.77E-09	1.18E-07	3.96E-08	0.161957	0.000
647082.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.80E-09	1.20E-07	4.06E-08	0.165463	0.000
647102.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.83E-09	1.23E-07	4.17E-08	0.169277	0.000
647122.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.85E-09	1.26E-07	4.31E-08	0.173583	0.000
647142.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.88E-09	1.29E-07	4.45E-08	0.178356	0.001
647162.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.91E-09	1.32E-07	4.61E-08	0.183363	0.001
647182.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.93E-09	1.36E-07	4.77E-08	0.188392	0.001
647202.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	1.39E-07	4.92E-08	0.193526	0.001
647222.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	1.43E-07	5.09E-08	0.198936	0.001
647242.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	1.47E-07	5.28E-08	0.204922	0.001
647262.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.04E-09	1.52E-07	5.49E-08	0.211543	0.001
647282.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.56E-07	5.72E-08	0.218585	0.001
647302.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.61E-07	5.95E-08	0.225876	0.001

647322.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.66E-07	6.17E-08	0.232886	0.001
647342.75	4185479.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.71E-07	6.41E-08	0.24011	0.001
647362.75	4185479.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.76E-07	6.65E-08	0.247268	0.001
647382.75	4185479.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.81E-07	6.92E-08	0.255702	0.001
647402.75	4185479.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.88E-07	7.24E-08	0.265665	0.001
647422.75	4185479.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.94E-07	7.54E-08	0.274709	0.001
647022.75	4185499.9	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-09	1.15E-07	3.84E-08	0.157691	0.000
647042.75	4185499.9	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.78E-09	1.17E-07	3.94E-08	0.160946	0.000
647062.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-09	1.19E-07	4.04E-08	0.164413	0.000
647082.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.83E-09	1.22E-07	4.15E-08	0.168033	0.000
647102.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.86E-09	1.24E-07	4.26E-08	0.171887	0.000
647122.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.89E-09	1.27E-07	4.39E-08	0.176171	0.001
647142.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.91E-09	1.31E-07	4.54E-08	0.180997	0.001
647162.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	1.34E-07	4.71E-08	0.186213	0.001
647182.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	1.38E-07	4.87E-08	0.191524	0.001
647202.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.99E-09	1.42E-07	5.04E-08	0.196958	0.001
647222.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.45E-07	5.23E-08	0.202757	0.001
647242.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.50E-07	5.43E-08	0.209161	0.001
647262.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.55E-07	5.65E-08	0.216097	0.001
647282.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.60E-07	5.89E-08	0.223622	0.001
647302.75	4185499.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.65E-07	6.14E-08	0.231309	0.001
647322.75	4185499.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.70E-07	6.41E-08	0.239641	0.001
647342.75	4185499.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.76E-07	6.68E-08	0.247779	0.001
647362.75	4185499.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.82E-07	6.98E-08	0.256843	0.001
647382.75	4185499.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.87E-07	7.26E-08	0.265081	0.001
647402.75	4185499.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.95E-07	7.63E-08	0.276699	0.001
647022.75	4185519.9	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.79E-09	1.16E-07	3.93E-08	0.160455	0.000
647042.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-09	1.19E-07	4.03E-08	0.16378	0.000
647062.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.84E-09	1.21E-07	4.14E-08	0.167329	0.000
647082.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.87E-09	1.24E-07	4.25E-08	0.171107	0.000
647102.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.89E-09	1.26E-07	4.37E-08	0.175081	0.000
647122.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.92E-09	1.29E-07	4.51E-08	0.179404	0.001
647142.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.95E-09	1.33E-07	4.66E-08	0.184275	0.001
647162.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.97E-09	1.36E-07	4.83E-08	0.189685	0.001
647182.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	1.40E-07	5.01E-08	0.195385	0.001
647202.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	1.44E-07	5.19E-08	0.201198	0.001
647222.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.48E-07	5.38E-08	0.207273	0.001
647242.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.53E-07	5.59E-08	0.213881	0.001
647262.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.58E-07	5.83E-08	0.221125	0.001
647282.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.63E-07	6.07E-08	0.228689	0.001
647302.75	4185519.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.68E-07	6.32E-08	0.236252	0.001
647322.75	4185519.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.74E-07	6.64E-08	0.246008	0.001
647342.75	4185519.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.81E-07	6.96E-08	0.255983	0.001
647362.75	4185519.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.88E-07	7.30E-08	0.265891	0.001
647382.75	4185519.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.94E-07	7.64E-08	0.275977	0.001
647022.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.82E-09	1.18E-07	4.04E-08	0.163673	0.000
647042.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.85E-09	1.21E-07	4.15E-08	0.167148	0.000
647062.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.87E-09	1.23E-07	4.26E-08	0.170829	0.000
647082.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-09	1.26E-07	4.38E-08	0.174772	0.000
647102.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.93E-09	1.29E-07	4.51E-08	0.178978	0.001
647122.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	1.32E-07	4.65E-08	0.183476	0.001
647142.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	1.35E-07	4.80E-08	0.188456	0.001
647162.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	1.39E-07	4.98E-08	0.194086	0.001
647182.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.04E-09	1.43E-07	5.17E-08	0.200159	0.001
647202.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.48E-07	5.37E-08	0.20636	0.001
647222.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.52E-07	5.57E-08	0.212763	0.001
647242.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.57E-07	5.80E-08	0.21978	0.001
647262.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.62E-07	6.04E-08	0.227264	0.001
647282.75	4185539.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.67E-07	6.30E-08	0.235109	0.001
647302.75	4185539.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.73E-07	6.58E-08	0.243555	0.001
647322.75	4185539.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.79E-07	6.91E-08	0.253741	0.001
647342.75	4185539.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.86E-07	7.25E-08	0.263764	0.001
647362.75	4185539.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.93E-07	7.60E-08	0.274164	0.001
647022.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.85E-09	1.21E-07	4.16E-08	0.167124	0.000
647042.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.88E-09	1.23E-07	4.27E-08	0.17082	0.000
647062.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.91E-09	1.26E-07	4.39E-08	0.174652	0.000
647082.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	1.29E-07	4.52E-08	0.178864	0.001
647102.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	1.32E-07	4.65E-08	0.183259	0.001
647122.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.99E-09	1.35E-07	4.80E-08	0.188019	0.001
647142.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.39E-07	4.97E-08	0.193219	0.001
647162.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.43E-07	5.15E-08	0.199132	0.001
647182.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.47E-07	5.36E-08	0.205639	0.001
647202.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.52E-07	5.58E-08	0.212416	0.001
647222.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.56E-07	5.80E-08	0.219268	0.001
647242.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.61E-07	6.04E-08	0.226676	0.001
647262.75	4185559.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.67E-07	6.31E-08	0.235007	0.001
647282.75	4185559.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.72E-07	6.60E-08	0.243658	0.001
647302.75	4185559.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.79E-07	6.91E-08	0.253067	0.001
647322.75	4185559.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.85E-07	7.22E-08	0.26209	0.001
647022.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.89E-09	1.23E-07	4.29E-08	0.170811	0.000
647042.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.91E-09	1.26E-07	4.41E-08	0.174706	0.000
647062.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	1.29E-07	4.53E-08	0.178859	0.001
647082.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.97E-09	1.32E-07	4.67E-08	0.183317	0.001
647102.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	1.35E-07	4.82E-08	0.18796	0.001
647122.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.38E-07	4.98E-08	0.192988	0.001
647142.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.42E-07	5.15E-08	0.198467	0.001
647162.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.46E-07	5.35E-08	0.204752	0.001
647182.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.51E-07	5.58E-08	0.211795	0.001
647202.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.56E-07	5.82E-08	0.21917	0.001
647222.75	4185579.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.61E-07	6.06E-08	0.226647	0.001
647242.75	4185579.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.66E-07	6.32E-08	0.234527	0.001
647262.75	4185579.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.72E-07	6.63E-08	0.243972	0.001
647282.75	4185579.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	1.79E-07	6.96E-08	0.254113	0.001
647302.75	4185579.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.85E-07	7.25E-08	0.262487	0.001
647022.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.91E-09	1.25E-07	4.41E-08	0.174446	0.000
647042.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	1.28E-07	4.55E-08	0.178789	0.001
647062.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	1.31E-07	4.69E-08	0.183277	0.001
647082.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	1.35E-07	4.84E-08	0.188068	0.001
647102.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	1.38E-07	4.99E-08	0.193054	0.001
647122.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.42E-07	5.16E-08	0.198309	0.001
647142.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.46E-07	5.34E-08	0.204039	0.001

647162.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.50E-07	5.56E-08	0.210765	0.001
647182.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.55E-07	5.81E-08	0.218352	0.001
647202.75	4185599.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.61E-07	6.07E-08	0.226378	0.001
647222.75	4185599.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.66E-07	6.35E-08	0.23495	0.001
647242.75	4185599.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	1.72E-07	6.64E-08	0.243653	0.001
647262.75	4185599.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	1.79E-07	6.98E-08	0.254052	0.001
647282.75	4185599.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	1.85E-07	7.31E-08	0.263859	0.001
647022.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	1.28E-07	4.54E-08	0.178167	0.001
647042.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.97E-09	1.31E-07	4.68E-08	0.182571	0.001
647062.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	1.34E-07	4.83E-08	0.18726	0.001
647082.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.37E-07	4.99E-08	0.192352	0.001
647102.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.41E-07	5.17E-08	0.19797	0.001
647122.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.45E-07	5.35E-08	0.203787	0.001
647142.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.49E-07	5.54E-08	0.209777	0.001
647162.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.54E-07	5.77E-08	0.216843	0.001
647182.75	4185619.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.59E-07	6.04E-08	0.224966	0.001
647202.75	4185619.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.65E-07	6.33E-08	0.233868	0.001
647222.75	4185619.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	1.72E-07	6.65E-08	0.243628	0.001
647242.75	4185619.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	1.78E-07	6.98E-08	0.253411	0.001
647262.75	4185619.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	1.85E-07	7.30E-08	0.262937	0.001
647102.75	4185639.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.44E-07	5.31E-08	0.202092	0.001
647122.75	4185639.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.48E-07	5.51E-08	0.208324	0.001
647142.75	4185639.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.53E-07	5.73E-08	0.215138	0.001
647162.75	4185639.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.58E-07	5.98E-08	0.222887	0.001
647182.75	4185639.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	1.64E-07	6.27E-08	0.231471	0.001
647202.75	4185639.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	1.70E-07	6.58E-08	0.241051	0.001
647222.75	4185639.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	1.77E-07	6.93E-08	0.251593	0.001
647242.75	4185639.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	1.83E-07	7.26E-08	0.261287	0.001
647162.75	4185659.9	0.000	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.61E-07	6.14E-08	0.227179	0.001
647182.75	4185659.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.66E-07	6.43E-08	0.235776	0.001
647202.75	4185659.9	0.000	0.000	0.000	0.003	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	1.73E-07	6.74E-08	0.245255	0.001
648341.36	4184509.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.43E-09	2.94E-07	8.42E-08	0.382237	0.001
648321.36	4184529.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.46E-09	2.92E-07	8.36E-08	0.379683	0.001
648341.36	4184529.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.47E-09	3.04E-07	8.67E-08	0.394973	0.001
648361.36	4184529.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.48E-09	3.17E-07	9.00E-08	0.411381	0.001
648281.36	4184549.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.47E-09	2.77E-07	7.98E-08	0.361682	0.001
648301.36	4184549.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.47E-09	2.89E-07	8.28E-08	0.37647	0.001
648321.36	4184549.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.49E-09	3.01E-07	8.59E-08	0.391713	0.001
648341.36	4184549.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.50E-09	3.14E-07	8.92E-08	0.408131	0.001
648361.36	4184549.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.51E-09	3.29E-07	9.27E-08	0.425828	0.001
648281.36	4184569.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.50E-09	2.83E-07	8.13E-08	0.369018	0.001
648301.36	4184569.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.51E-09	2.98E-07	8.50E-08	0.388014	0.001
648321.36	4184569.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.52E-09	3.11E-07	8.82E-08	0.404051	0.001
648341.36	4184569.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.54E-09	3.25E-07	9.18E-08	0.421726	0.001
648361.36	4184569.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.55E-09	3.41E-07	9.56E-08	0.44073	0.002
648381.36	4184569.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.54E-09	3.56E-07	9.93E-08	0.459546	0.002
648281.36	4184589.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.53E-09	2.91E-07	8.32E-08	0.378225	0.001
648301.36	4184589.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.54E-09	3.08E-07	8.73E-08	0.399846	0.001
648321.36	4184589.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.55E-09	3.22E-07	9.07E-08	0.41686	0.001
648341.36	4184589.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.57E-09	3.37E-07	9.45E-08	0.435817	0.002
648361.36	4184589.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.58E-09	3.53E-07	9.86E-08	0.456325	0.002
648381.36	4184589.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.59E-09	3.71E-07	1.03E-07	0.478741	0.002
648281.36	4184609.59	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.56E-09	2.99E-07	8.52E-08	0.388695	0.001
648301.36	4184609.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.58E-09	3.17E-07	8.95E-08	0.4107	0.001
648321.36	4184609.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.59E-09	3.32E-07	9.33E-08	0.43021	0.001
648341.36	4184609.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.60E-09	3.49E-07	9.73E-08	0.450512	0.002
648361.36	4184609.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.62E-09	3.66E-07	1.02E-07	0.4727	0.002
648381.36	4184609.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.63E-09	3.86E-07	1.07E-07	0.49721	0.002
648281.36	4184629.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.60E-09	3.08E-07	8.74E-08	0.399878	0.001
648301.36	4184629.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.62E-09	3.25E-07	9.17E-08	0.421598	0.001
648321.36	4184629.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.62E-09	3.43E-07	9.60E-08	0.444109	0.002
648341.36	4184629.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.64E-09	3.61E-07	1.00E-07	0.46591	0.002
648361.36	4184629.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.65E-09	3.80E-07	1.05E-07	0.489959	0.002
648381.36	4184629.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.66E-09	4.02E-07	1.10E-07	0.516601	0.002
648401.36	4184629.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.65E-09	4.20E-07	1.15E-07	0.540175	0.002
648281.36	4184649.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.63E-09	3.17E-07	8.97E-08	0.411516	0.001
648301.36	4184649.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.65E-09	3.37E-07	9.45E-08	0.43606	0.002
648321.36	4184649.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.66E-09	3.55E-07	9.88E-08	0.458648	0.002
648341.36	4184649.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.67E-09	3.74E-07	1.04E-07	0.482172	0.002
648361.36	4184649.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.69E-09	3.95E-07	1.09E-07	0.508175	0.002
648381.36	4184649.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.70E-09	4.18E-07	1.14E-07	0.537225	0.002
648401.36	4184649.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.70E-09	4.44E-07	1.21E-07	0.569211	0.002
648281.36	4184669.59	0.000	0.000	0.000	0.002	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.67E-09	3.27E-07	9.22E-08	0.423673	0.001
648301.36	4184669.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.68E-09	3.49E-07	9.74E-08	0.451048	0.002
648321.36	4184669.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.69E-09	3.67E-07	1.02E-07	0.473924	0.002
648341.36	4184669.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.71E-09	3.88E-07	1.07E-07	0.499252	0.002
648361.36	4184669.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.72E-09	4.10E-07	1.12E-07	0.527396	0.002
648381.36	4184669.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.74E-09	4.36E-07	1.19E-07	0.559093	0.002
648401.36	4184669.59	0.000	0.000	0.000	0.003	0.001	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-09	4.65E-07	1.26E-07	0.595034	0.002
648281.36	4184689.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.70E-09	3.37E-07	9.47E-08	0.436488	0.002
648301.36	4184689.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.72E-09	3.61E-07	1.00E-07	0.465597	0.002
648321.36	4184689.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.73E-09	3.80E-07	1.05E-07	0.489765	0.002
648341.36	4184689.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-09	4.02E-07	1.10E-07	0.516926	0.002
648361.36	4184689.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.76E-09	4.26E-07	1.16E-07	0.547383	0.002
648381.36	4184689.59	0.000	0.000	0.000	0.003	0.001	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.77E-09	4.54E-07	1.23E-07	0.581863	0.002
648401.36	4184689.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.79E-09	4.85E-07	1.31E-07	0.621277	0.002
648281.36	4184709.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.74E-09	3.48E-07	9.75E-08	0.450047	0.002
648301.36	4184709.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-09	3.72E-07	1.03E-07	0.479889	0.002
648321.36	4184709.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.77E-09	3.93E-07	1.08E-07	0.505747	0.002
648341.36	4184709.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.78E-09	4.16E-07	1.14E-07	0.534821	0.002
648361.36	4184709.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.80E-09	4.42E-07	1.21E-07	0.567614	0.002
648381.36	4184709.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-09	4.72E-07	1.28E-07	0.604975	0.002
648401.36	4184709.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.82E-09	5.07E-07	1.36E-07	0.647977	0.002
648421.36	4184709.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-09	5.42E-07	1.45E-07	0.691834	0.003
648281.36	4184729.59	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.78E-09	3.59E-07	1.00E-07	0.463611	0.002
648301.36	4184729.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.79E-09	3.83E-07	1.06E-07	0.493898	0.002
648321.36	4184729.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.80E-09	4.05E-07	1.11E-07	0.52144	0.002
648341.36	4184729.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.82E-09	4.30E-07	1.18E-07	0.552449	0.002
648361.36	4184729.59	0.000	0.000	0.000	0.003	0.001	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.83E-09	4.58E-07	1.25E-07	0.587622	0.002
648381.36	4184729.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.85E-09	4.90E-07	1.32E-07	0.627722	0.002
648401.36	4184729.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.86E-09	5.28E-07	1.42E-07	0.674291	0.002

648421.36	4184729.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.86E-09	5.70E-07	1.52E-07	0.726245	0.003
648281.36	4184749.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-09	3.70E-07	1.03E-07	0.47783	0.002
648301.36	4184749.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.82E-09	3.94E-07	1.09E-07	0.507413	0.002
648321.36	4184749.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.84E-09	4.17E-07	1.15E-07	0.536526	0.002
648341.36	4184749.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.86E-09	4.44E-07	1.21E-07	0.569427	0.002
648361.36	4184749.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.87E-09	4.74E-07	1.28E-07	0.606771	0.002
648381.36	4184749.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.88E-09	5.08E-07	1.37E-07	0.649672	0.002
648401.36	4184749.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-09	5.48E-07	1.47E-07	0.699586	0.003
648421.36	4184749.59	0.000	0.000	0.000	0.004	0.001	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-09	5.94E-07	1.58E-07	0.757137	0.003
648281.36	4184769.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.85E-09	3.82E-07	1.06E-07	0.492969	0.002
648301.36	4184769.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.86E-09	4.04E-07	1.11E-07	0.520303	0.002
648321.36	4184769.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.88E-09	4.29E-07	1.17E-07	0.550943	0.002
648341.36	4184769.59	0.000	0.000	0.000	0.003	0.001	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-09	4.57E-07	1.24E-07	0.585719	0.002
648361.36	4184769.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.91E-09	4.88E-07	1.32E-07	0.625461	0.002
648381.36	4184769.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.93E-09	5.25E-07	1.41E-07	0.671286	0.002
648401.36	4184769.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	5.68E-07	1.52E-07	0.724692	0.003
648421.36	4184769.59	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.95E-09	6.18E-07	1.64E-07	0.786854	0.003
648281.36	4184789.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.88E-09	3.91E-07	1.08E-07	0.5044	0.002
648301.36	4184789.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.90E-09	4.14E-07	1.14E-07	0.532906	0.002
648321.36	4184789.59	0.000	0.000	0.000	0.003	0.001	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.92E-09	4.40E-07	1.20E-07	0.565035	0.002
648341.36	4184789.59	0.000	0.000	0.000	0.003	0.001	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	4.69E-07	1.28E-07	0.601539	0.002
648361.36	4184789.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.95E-09	5.03E-07	1.36E-07	0.643347	0.002
648381.36	4184789.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	5.41E-07	1.45E-07	0.691739	0.003
648401.36	4184789.59	0.000	0.000	0.000	0.004	0.001	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	5.87E-07	1.57E-07	0.748166	0.003
648421.36	4184789.59	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	6.38E-07	1.69E-07	0.812057	0.003
648281.36	4184809.59	0.000	0.000	0.000	0.003	0.001	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.92E-09	4.00E-07	1.11E-07	0.515493	0.002
648301.36	4184809.59	0.000	0.000	0.000	0.003	0.001	0.002	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.94E-09	4.24E-07	1.17E-07	0.545148	0.002
648321.36	4184809.59	0.000	0.000	0.000	0.003	0.001	0.003	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	4.50E-07	1.23E-07	0.578574	0.002
648341.36	4184809.59	0.000	0.000	0.000	0.003	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.97E-09	4.81E-07	1.31E-07	0.616448	0.002
648361.36	4184809.59	0.000	0.000	0.000	0.004	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.99E-09	5.15E-07	1.39E-07	0.659705	0.002
648381.36	4184809.59	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	5.56E-07	1.49E-07	0.709774	0.003
648401.36	4184809.59	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	6.02E-07	1.61E-07	0.767233	0.003
648715.48	4183765.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.60E-09	1.82E-07	7.12E-08	0.256866	0.001
648735.48	4183765.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.60E-09	1.88E-07	7.43E-08	0.266066	0.001
648755.48	4183765.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.60E-09	1.95E-07	7.76E-08	0.276099	0.001
648675.48	4183785.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.61E-09	1.74E-07	6.68E-08	0.244814	0.001
648695.48	4183785.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.61E-09	1.79E-07	6.93E-08	0.252355	0.001
648715.48	4183785.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-09	1.85E-07	7.21E-08	0.261066	0.001
648735.48	4183785.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-09	1.92E-07	7.52E-08	0.270445	0.001
648755.48	4183785.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.63E-09	1.99E-07	7.86E-08	0.280792	0.001
648635.48	4183805.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-09	1.68E-07	6.30E-08	0.23446	0.001
648655.48	4183805.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-09	1.72E-07	6.52E-08	0.241167	0.001
648675.48	4183805.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.63E-09	1.77E-07	6.75E-08	0.248508	0.001
648695.48	4183805.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.63E-09	1.83E-07	7.02E-08	0.256651	0.001
648715.48	4183805.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.64E-09	1.89E-07	7.30E-08	0.265488	0.001
648735.48	4183805.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-09	1.95E-07	7.62E-08	0.275319	0.001
648755.48	4183805.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-09	2.03E-07	7.99E-08	0.286252	0.001
648775.48	4183805.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-09	2.10E-07	8.36E-08	0.297392	0.001
648795.48	4183805.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-09	2.18E-07	8.77E-08	0.309599	0.001
648635.48	4183825.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.64E-09	1.71E-07	6.37E-08	0.238192	0.001
648655.48	4183825.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.64E-09	1.76E-07	6.60E-08	0.245222	0.001
648675.48	4183825.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-09	1.81E-07	6.84E-08	0.252799	0.001
648695.48	4183825.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-09	1.86E-07	7.11E-08	0.2612	0.001
648715.48	4183825.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.66E-09	1.93E-07	7.41E-08	0.270454	0.001
648735.48	4183825.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.67E-09	2.00E-07	7.75E-08	0.280817	0.001
648755.48	4183825.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.68E-09	2.07E-07	8.10E-08	0.291641	0.001
648775.48	4183825.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.67E-09	2.14E-07	8.48E-08	0.302688	0.001
648795.48	4183825.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.66E-09	2.21E-07	8.83E-08	0.31254	0.001
648815.48	4183825.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.67E-09	2.28E-07	9.22E-08	0.323476	0.001
648635.48	4183845.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.66E-09	1.74E-07	6.46E-08	0.242467	0.001
648655.48	4183845.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.67E-09	1.79E-07	6.69E-08	0.249613	0.001
648675.48	4183845.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.67E-09	1.84E-07	6.94E-08	0.257502	0.001
648695.48	4183845.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.68E-09	1.90E-07	7.22E-08	0.266317	0.001
648715.48	4183845.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-09	1.97E-07	7.53E-08	0.275895	0.001
648735.48	4183845.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-09	2.04E-07	7.87E-08	0.286304	0.001
648755.48	4183845.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-09	2.11E-07	8.22E-08	0.297105	0.001
648775.48	4183845.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-09	2.19E-07	8.62E-08	0.309133	0.001
648795.48	4183845.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-09	2.26E-07	8.98E-08	0.319697	0.001
648815.48	4183845.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-09	2.31E-07	9.28E-08	0.327356	0.001
648655.48	4183865.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-09	1.83E-07	6.78E-08	0.254424	0.001
648675.48	4183865.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-09	1.89E-07	7.05E-08	0.262691	0.001
648695.48	4183865.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-09	1.94E-07	7.33E-08	0.271416	0.001
648715.48	4183865.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-09	2.01E-07	7.62E-08	0.28056	0.001
648735.48	4183865.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.71E-09	2.08E-07	7.97E-08	0.291428	0.001
648755.48	4183865.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	2.16E-07	8.34E-08	0.302922	0.001
648775.48	4183865.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.71E-09	2.23E-07	8.71E-08	0.313834	0.001
648795.48	4183865.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	2.32E-07	9.12E-08	0.326699	0.001
648815.48	4183865.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.71E-09	2.35E-07	9.37E-08	0.332262	0.001
648835.48	4183865.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	2.44E-07	9.80E-08	0.345619	0.001
648655.48	4183885.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.71E-09	1.87E-07	6.89E-08	0.259452	0.001
648675.48	4183885.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	1.93E-07	7.15E-08	0.26783	0.001
648695.48	4183885.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	1.99E-07	7.44E-08	0.276894	0.001
648715.48	4183885.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	2.05E-07	7.73E-08	0.285852	0.001
648735.48	4183885.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	2.12E-07	8.06E-08	0.296045	0.001
648755.48	4183885.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.20E-07	8.44E-08	0.307958	0.001
648775.48	4183885.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.28E-07	8.82E-08	0.319701	0.001
648795.48	4183885.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.36E-07	9.20E-08	0.331599	0.001
648815.48	4183885.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.41E-07	9.50E-08	0.339566	0.001
648835.48	4183885.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.47E-07	9.82E-08	0.348841	0.001
648655.48	4183905.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.73E-09	1.91E-07	6.99E-08	0.264698	0.001
648675.48	4183905.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	1.97E-07	7.27E-08	0.273326	0.001
648695.48	4183905.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.03E-07	7.54E-08	0.281931	0.001
648715.48	4183905.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-09	2.08E-07	7.81E-08	0.289691	0.001
648735.48	4183905.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.73E-09	2.16E-07	8.15E-08	0.300793	0.001
648755.48	4183905.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.23E-07	8.51E-08	0.312309	0.001
648775.48	4183905.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-09	2.32E-07	8.91E-08	0.324992	0.001
648795.48	4183905.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-09	2.40E-07	9.27E-08	0.336417	0.001
648815.48	4183905.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-09	2.46E-07	9.61E-08	0.346286	0.001
648835.48	4183905.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-09	2.51E-07	9.86E-08	0.352997	0.001
648655.48	4183925.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-09	1.95E-07	7.10E-08	0.270053	0.001
648675.48	4183925.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-09	2.01E-07	7.36E-08	0.278282	0.001

648695.48	4183925.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.06E-07	7.62E-08	0.286376	0.001
648715.48	4183925.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-09	2.13E-07	7.92E-08	0.295471	0.001
648735.48	4183925.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-09	2.21E-07	8.27E-08	0.307186	0.001
648755.48	4183925.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.77E-09	2.29E-07	8.63E-08	0.318602	0.001
648775.48	4183925.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-09	2.36E-07	8.98E-08	0.32996	0.001
648795.48	4183925.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-09	2.44E-07	9.33E-08	0.34125	0.001
648815.48	4183925.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-09	2.52E-07	9.69E-08	0.352743	0.001
648835.48	4183925.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-09	2.54E-07	9.89E-08	0.356857	0.001
648675.48	4183945.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-09	2.05E-07	7.46E-08	0.283479	0.001
648695.48	4183945.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-09	2.11E-07	7.73E-08	0.291644	0.001
648715.48	4183945.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-09	2.17E-07	8.03E-08	0.301532	0.001
648735.48	4183945.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-09	2.26E-07	8.38E-08	0.313213	0.001
648755.48	4183945.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-09	2.33E-07	8.71E-08	0.323933	0.001
648775.48	4183945.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.80E-09	2.40E-07	9.04E-08	0.334692	0.001
648795.48	4183945.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-09	2.49E-07	9.39E-08	0.346208	0.001
648815.48	4183945.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-09	2.53E-07	9.65E-08	0.353276	0.001
648835.48	4183945.64	0.000	0.000	0.000	0.003	0.001	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-09	2.58E-07	9.92E-08	0.361361	0.001
648855.48	4183945.64	0.000	0.000	0.000	0.004	0.001	0.003	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.82E-09	2.69E-07	1.04E-07	0.376442	0.001
648675.48	4183965.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-09	2.08E-07	7.52E-08	0.286887	0.001
648695.48	4183965.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.77E-09	2.15E-07	7.82E-08	0.296864	0.001
648715.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-09	2.22E-07	8.14E-08	0.307682	0.001
648735.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-09	2.30E-07	8.46E-08	0.31809	0.001
648755.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.80E-09	2.37E-07	8.77E-08	0.328353	0.001
648775.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-09	2.43E-07	9.06E-08	0.337452	0.001
648795.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-09	2.47E-07	9.28E-08	0.343365	0.001
648815.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.82E-09	2.54E-07	9.61E-08	0.35437	0.001
648835.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.84E-09	2.63E-07	9.98E-08	0.367021	0.001
648855.48	4183965.64	0.000	0.000	0.000	0.003	0.001	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.85E-09	2.74E-07	1.04E-07	0.382082	0.001
648655.48	4183985.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-09	2.07E-07	7.37E-08	0.284323	0.001
648675.48	4183985.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-09	2.10E-07	7.57E-08	0.289784	0.001
648695.48	4183985.64	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-09	2.17E-07	7.86E-08	0.299323	0.001
648715.48	4183985.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.80E-09	2.24E-07	8.17E-08	0.30974	0.001
648735.48	4183985.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-09	2.34E-07	8.53E-08	0.323041	0.001
648755.48	4183985.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.82E-09	2.40E-07	8.80E-08	0.331657	0.001
648775.48	4183985.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.83E-09	2.44E-07	9.02E-08	0.337968	0.001
648795.48	4183985.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.84E-09	2.52E-07	9.34E-08	0.348971	0.001
648695.48	4184005.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-09	2.24E-07	8.01E-08	0.30789	0.001
648715.48	4184005.64	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.82E-09	2.29E-07	8.27E-08	0.315675	0.001
648735.48	4184005.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.83E-09	2.36E-07	8.54E-08	0.325064	0.001
648755.48	4184005.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.84E-09	2.42E-07	8.82E-08	0.334482	0.001
648775.48	4184005.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.85E-09	2.50E-07	9.13E-08	0.345298	0.001
648735.48	4184025.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.86E-09	2.42E-07	8.67E-08	0.332797	0.001
648755.48	4184025.64	0.000	0.000	0.000	0.003	0.001	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.87E-09	2.49E-07	8.93E-08	0.341758	0.001
649209.27	4184319.61	0.000	0.000	0.000	0.018	0.007	0.014	0.054	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.000	4.50E-09	3.00E-06	1.02E-06	4.027565	0.014
649229.27	4184319.61	0.000	0.000	0.000	0.014	0.005	0.011	0.043	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	4.50E-09	2.39E-06	9.02E-07	3.296565	0.012
649249.27	4184319.61	0.000	0.000	0.000	0.012	0.004	0.009	0.035	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	4.50E-09	1.97E-06	8.30E-07	2.806147	0.009
649269.27	4184319.61	0.000	0.000	0.000	0.010	0.004	0.008	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	4.50E-09	1.67E-06	7.85E-07	2.459235	0.008
649289.27	4184319.61	0.000	0.000	0.000	0.009	0.003	0.007	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.000	4.51E-09	1.45E-06	7.58E-07	2.208943	0.007
649309.27	4184319.61	0.000	0.000	0.000	0.008	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.000	4.51E-09	1.27E-06	7.42E-07	2.018615	0.006
649329.27	4184319.61	0.000	0.000	0.000	0.007	0.003	0.006	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.021	0.000	4.51E-09	1.13E-06	7.34E-07	1.872802	0.005
649209.27	4184339.61	0.000	0.000	0.000	0.016	0.006	0.013	0.049	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	4.53E-09	2.73E-06	8.32E-07	3.570719	0.013
649229.27	4184339.61	0.000	0.000	0.000	0.013	0.005	0.010	0.040	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	4.53E-09	2.22E-06	7.14E-07	2.937134	0.011
649249.27	4184339.61	0.000	0.000	0.000	0.011	0.004	0.009	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	4.54E-09	1.86E-06	6.37E-07	2.498586	0.009
649269.27	4184339.61	0.000	0.000	0.000	0.009	0.004	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	4.54E-09	1.59E-06	5.83E-07	2.177313	0.008
649289.27	4184339.61	0.000	0.000	0.000	0.008	0.003	0.007	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	4.54E-09	1.39E-06	5.45E-07	1.935338	0.007
649309.27	4184339.61	0.000	0.000	0.000	0.007	0.003	0.006	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	4.54E-09	1.23E-06	5.16E-07	1.745383	0.006
649329.27	4184339.61	0.000	0.000	0.000	0.007	0.003	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	4.54E-09	1.10E-06	4.92E-07	1.593358	0.005
649349.27	4184339.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	4.54E-09	9.91E-07	4.74E-07	1.469316	0.005
649369.27	4184339.61	0.000	0.000	0.000	0.006	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000	4.55E-09	9.03E-07	4.58E-07	1.365866	0.004
649209.27	4184359.61	0.000	0.000	0.000	0.014	0.005	0.011	0.045	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.56E-09	2.46E-06	7.13E-07	3.176758	0.012
649229.27	4184359.61	0.000	0.000	0.000	0.012	0.004	0.009	0.037	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	4.57E-09	2.04E-06	6.13E-07	2.654232	0.010
649249.27	4184359.61	0.000	0.000	0.000	0.010	0.004	0.008	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	4.57E-09	1.73E-06	5.43E-07	2.277064	0.008
649269.27	4184359.61	0.000	0.000	0.000	0.009	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	4.57E-09	1.50E-06	4.93E-07	1.994891	0.007
649289.27	4184359.61	0.000	0.000	0.000	0.008	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	4.57E-09	1.32E-06	4.55E-07	1.776869	0.006
649309.27	4184359.61	0.000	0.000	0.000	0.007	0.003	0.006	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	4.58E-09	1.17E-06	4.25E-07	1.603561	0.006
649329.27	4184359.61	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	4.58E-09	1.06E-06	4.01E-07	1.462637	0.005
649349.27	4184359.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	4.58E-09	9.60E-07	3.81E-07	1.345861	0.005
649369.27	4184359.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	4.58E-09	8.78E-07	3.63E-07	1.245999	0.004
649189.27	4184379.61	0.000	0.000	0.000	0.016	0.006	0.012	0.049	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.60E-09	2.69E-06	7.42E-07	3.435049	0.013
649209.27	4184379.61	0.000	0.000	0.000	0.013	0.005	0.010	0.040	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.60E-09	2.20E-06	6.21E-07	2.827552	0.011
649229.27	4184379.61	0.000	0.000	0.000	0.011	0.004	0.008	0.034	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.60E-09	1.86E-06	5.39E-07	2.400544	0.009
649249.27	4184379.61	0.000	0.000	0.000	0.009	0.003	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.60E-09	1.60E-06	4.79E-07	2.082573	0.008
649269.27	4184379.61	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.60E-09	1.40E-06	4.34E-07	1.839235	0.007
649289.27	4184379.61	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.61E-09	1.24E-06	3.99E-07	1.648252	0.006
649309.27	4184379.61	0.000	0.000	0.000	0.007	0.002	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.61E-09	1.12E-06	3.70E-07	1.49225	0.005
649329.27	4184379.61	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.61E-09	1.01E-06	3.47E-07	1.364203	0.005
649349.27	4184379.61	0.000	0.000	0.000	0.006	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.61E-09	9.25E-07	3.28E-07	1.257888	0.004
649369.27	4184379.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	4.62E-09	8.50E-07	3.11E-07	1.165671	0.004
649169.27	4184399.61	0.000	0.000	0.000	0.017	0.006	0.013	0.053	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.63E-09	2.90E-06	7.82E-07	3.690923	0.014
649189.27	4184399.61	0.000	0.000	0.000	0.013	0.005	0.011	0.043	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.63E-09	2.36E-06	6.41E-07	3.001596	0.011
649209.27	4184399.61	0.000	0.000	0.000	0.011	0.004	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.63E-09	1.97E-06	5.46E-07	2.5234	0.009
649229.27	4184399.61	0.000	0.000	0.000	0.010	0.004	0.008	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.64E-09	1.69E-06	4.79E-07	2.174655	0.008
649249.27	4184399.61	0.000	0.000	0.000	0.008	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.63E-09	1.48E-06	4.28E-07	1.908436	0.007
649269.27	4184399.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.64E-09	1.31E-06	3.89E-07	1.700022	0.006
649289.27	4184399.61	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.64E-09	1.17E-06	3.59E-07	1.534577	0.006
649309.27	4184399.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.64E-09	1.06E-06	3.33E-07	1.396711	0.005
649329.27	4184399.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.64E-09	9.66E-07	3.11E-07	1.281997	0.005
649349.27	4184399.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.65E-09	8.88E-07	2.93E-07	1.185563	0.004
649369.27	4184399.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	4.65E-09	8.20E-07	2.77E-07	1.101466	0.004
649169.27	4184419.61	0.000	0.000	0.000	0.014	0.005	0.011	0.045	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.66E-09	2.48E-06	6.62E-07	3.14793	0.012
649189.27	4184419.61	0.000	0.000	0.000	0.012	0.004	0.009	0.038	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.66E-09	2.07E-06	5.57E-07	2.6268	0.010
649209.27	4184419.61	0.000	0.000	0.000	0.010	0.004	0.008	0.032	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.67E-09	1.76E-06	4.83E-07	2.251434	0.008
649229.27	4184419.61	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.67E-09	1.54E-06	4.29E-07	1.9714	0.007
649249.27	4184419.61	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.67E-09	1.36E-06	3.87E-07	1.751363	0.006
649269.27	4184419.61	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.67E-09	1.22E-06	3.54E-07	1.575087	0.006
649289.27	4184419.61	0.000	0.000	0.000	0.006	0.002	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.68E-09	1.10E-06	3.27E-07	1.431175	0.005
649309.27	4184419.61	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.68E-09	1.00E-06	3.03E-07	1.310435	0.005
649329.27	4184419.61	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.68E-09	9.20E-07	2.84E-07	1.20831	0.004
649349.27	4184419.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.68E-09	8.50E-07	2.67E-07	1.121218	0.004
649369.27	4184419.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.69E-09	7.89E-07	2.52E-07	1.045158	0.004
649149.27	4184439.61	0.000	0.000	0.000	0.015	0.006	0.012	0.046	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.69E-09	2.55E-06	6.71E-07	3.221779	0.012

649169.27	4184439.61	0.000	0.000	0.000	0.012	0.005	0.010	0.039	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.69E-09	2.13E-06	5.64E-07	2.697489	0.010
649189.27	4184439.61	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.70E-09	1.82E-06	4.87E-07	2.308537	0.009
649209.27	4184439.61	0.000	0.000	0.000	0.009	0.003	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.70E-09	1.58E-06	4.30E-07	2.016853	0.008
649229.27	4184439.61	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.70E-09	1.40E-06	3.86E-07	1.790645	0.007
649249.27	4184439.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.71E-09	1.25E-06	3.52E-07	1.609676	0.006
649269.27	4184439.61	0.000	0.000	0.000	0.007	0.002	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.71E-09	1.13E-06	3.23E-07	1.460717	0.005
649289.27	4184439.61	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.71E-09	1.03E-06	3.00E-07	1.336386	0.005
649309.27	4184439.61	0.000	0.000	0.000	0.006	0.002	0.004	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.71E-09	9.47E-07	2.79E-07	1.23111	0.004
649329.27	4184439.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.72E-09	8.74E-07	2.62E-07	1.140797	0.004
649349.27	4184439.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.72E-09	8.11E-07	2.46E-07	1.062567	0.004
649369.27	4184439.61	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.73E-09	7.57E-07	2.33E-07	0.994062	0.004
649129.27	4184459.61	0.000	0.000	0.000	0.015	0.006	0.012	0.047	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.72E-09	2.56E-06	6.69E-07	3.235172	0.012
649149.27	4184459.61	0.000	0.000	0.000	0.012	0.005	0.010	0.039	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.73E-09	2.14E-06	5.63E-07	2.708689	0.010
649169.27	4184459.61	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.73E-09	1.84E-06	4.87E-07	2.331809	0.009
649189.27	4184459.61	0.000	0.000	0.000	0.009	0.003	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.74E-09	1.61E-06	4.30E-07	2.039729	0.008
649209.27	4184459.61	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.74E-09	1.42E-06	3.85E-07	1.813285	0.007
649229.27	4184459.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.74E-09	1.28E-06	3.50E-07	1.632239	0.006
649249.27	4184459.61	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.74E-09	1.16E-06	3.21E-07	1.482583	0.005
649269.27	4184459.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.74E-09	1.06E-06	2.97E-07	1.357216	0.005
649289.27	4184459.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.75E-09	9.68E-07	2.77E-07	1.249536	0.005
649309.27	4184459.61	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.75E-09	8.95E-07	2.59E-07	1.158398	0.004
649329.27	4184459.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	4.75E-09	8.31E-07	2.43E-07	1.078572	0.004
649349.27	4184459.61	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.76E-09	7.75E-07	2.29E-07	1.008672	0.004
649369.27	4184459.61	0.000	0.000	0.000	0.004	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.76E-09	7.25E-07	2.17E-07	0.946855	0.003
649109.27	4184479.61	0.000	0.000	0.000	0.014	0.005	0.011	0.046	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.75E-09	2.53E-06	6.57E-07	3.195565	0.012
649129.27	4184479.61	0.000	0.000	0.000	0.012	0.005	0.010	0.039	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.76E-09	2.14E-06	5.56E-07	2.696961	0.010
649149.27	4184479.61	0.000	0.000	0.000	0.010	0.004	0.008	0.034	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.76E-09	1.84E-06	4.82E-07	2.329388	0.009
649169.27	4184479.61	0.000	0.000	0.000	0.009	0.003	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.77E-09	1.61E-06	4.27E-07	2.046039	0.008
649189.27	4184479.61	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.77E-09	1.43E-06	3.83E-07	1.821647	0.007
649209.27	4184479.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.77E-09	1.29E-06	3.47E-07	1.640701	0.006
649229.27	4184479.61	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.78E-09	1.17E-06	3.19E-07	1.492405	0.006
649249.27	4184479.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.78E-09	1.07E-06	2.95E-07	1.368132	0.005
649269.27	4184479.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.78E-09	9.84E-07	2.74E-07	1.262614	0.005
649289.27	4184479.61	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.79E-09	9.10E-07	2.57E-07	1.171207	0.004
649309.27	4184479.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.79E-09	8.46E-07	2.41E-07	1.091471	0.004
649329.27	4184479.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.79E-09	7.89E-07	2.27E-07	1.021097	0.004
649349.27	4184479.61	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.80E-09	7.39E-07	2.15E-07	0.958656	0.003
649369.27	4184479.61	0.000	0.000	0.000	0.004	0.002	0.003	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.80E-09	6.95E-07	2.03E-07	0.903136	0.003
649089.27	4184499.61	0.000	0.000	0.000	0.014	0.005	0.011	0.044	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.78E-09	2.43E-06	6.27E-07	3.064482	0.012
649109.27	4184499.61	0.000	0.000	0.000	0.012	0.004	0.009	0.038	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.79E-09	2.08E-06	5.38E-07	2.622485	0.010
649129.27	4184499.61	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.79E-09	1.81E-06	4.71E-07	2.285975	0.009
649149.27	4184499.61	0.000	0.000	0.000	0.009	0.003	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.80E-09	1.60E-06	4.19E-07	2.023053	0.008
649169.27	4184499.61	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.80E-09	1.43E-06	3.77E-07	1.810607	0.007
649189.27	4184499.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.80E-09	1.29E-06	3.43E-07	1.636274	0.006
649209.27	4184499.61	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.81E-09	1.17E-06	3.15E-07	1.491876	0.006
649069.27	4184519.61	0.000	0.000	0.000	0.013	0.005	0.010	0.041	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.81E-09	2.27E-06	5.83E-07	2.855876	0.011
649089.27	4184519.61	0.000	0.000	0.000	0.011	0.004	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.82E-09	1.98E-06	5.10E-07	2.496233	0.009
649109.27	4184519.61	0.000	0.000	0.000	0.010	0.004	0.008	0.032	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.82E-09	1.75E-06	4.52E-07	2.207039	0.008
649129.27	4184519.61	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.83E-09	1.56E-06	4.07E-07	1.973478	0.007
649149.27	4184519.61	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.83E-09	1.41E-06	3.69E-07	1.780805	0.007
649169.27	4184519.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.84E-09	1.28E-06	3.38E-07	1.618971	0.006
649189.27	4184519.61	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.84E-09	1.17E-06	3.11E-07	1.481875	0.006
649209.27	4184519.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.85E-09	1.07E-06	2.88E-07	1.364986	0.005
649049.27	4184539.61	0.000	0.000	0.000	0.012	0.004	0.009	0.038	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.84E-09	2.09E-06	5.34E-07	2.624116	0.010
649069.27	4184539.61	0.000	0.000	0.000	0.010	0.004	0.008	0.034	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.85E-09	1.86E-06	4.77E-07	2.343253	0.009
649089.27	4184539.61	0.000	0.000	0.000	0.009	0.004	0.007	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.86E-09	1.67E-06	4.29E-07	2.099787	0.008
649109.27	4184539.61	0.000	0.000	0.000	0.008	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.86E-09	1.50E-06	3.90E-07	1.897246	0.007
649129.27	4184539.61	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.87E-09	1.37E-06	3.57E-07	1.730009	0.006
649149.27	4184539.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.87E-09	1.25E-06	3.29E-07	1.586385	0.006
649169.27	4184539.61	0.000	0.000	0.000	0.007	0.002	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.88E-09	1.15E-06	3.05E-07	1.460158	0.005
649189.27	4184539.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.88E-09	1.06E-06	2.83E-07	1.350322	0.005
649209.27	4184539.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.89E-09	9.86E-07	2.65E-07	1.255538	0.005
649049.27	4184559.61	0.000	0.000	0.000	0.010	0.004	0.008	0.032	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.88E-09	1.75E-06	4.48E-07	2.201853	0.008
649069.27	4184559.61	0.000	0.000	0.000	0.009	0.003	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.89E-09	1.58E-06	4.07E-07	1.992323	0.008
649089.27	4184559.61	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.90E-09	1.44E-06	3.73E-07	1.821826	0.007
649109.27	4184559.61	0.000	0.000	0.000	0.007	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.90E-09	1.33E-06	3.44E-07	1.674716	0.006
649129.27	4184559.61	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.90E-09	1.22E-06	3.19E-07	1.545105	0.006
649149.27	4184559.61	0.000	0.000	0.000	0.006	0.002	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.91E-09	1.13E-06	2.98E-07	1.43178	0.005
649169.27	4184559.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.91E-09	1.05E-06	2.78E-07	1.330992	0.005
649189.27	4184559.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.92E-09	9.76E-07	2.61E-07	1.241678	0.005
649209.27	4184559.61	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.92E-09	9.12E-07	2.45E-07	1.162436	0.004
649069.27	4184579.61	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.93E-09	1.39E-06	3.58E-07	1.75445	0.007
649089.27	4184579.61	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.93E-09	1.28E-06	3.32E-07	1.621031	0.006
649109.27	4184579.61	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.94E-09	1.19E-06	3.10E-07	1.502391	0.006
649129.27	4184579.61	0.000	0.000	0.000	0.006	0.002	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.94E-09	1.10E-06	2.90E-07	1.398591	0.005
649149.27	4184579.61	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.95E-09	1.03E-06	2.72E-07	1.306385	0.005
649169.27	4184579.61	0.000	0.000	0.000	0.006	0.002	0.004	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.95E-09	9.63E-07	2.56E-07	1.223411	0.005
649189.27	4184579.61	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.96E-09	9.03E-07	2.41E-07	1.148897	0.004
649209.27	4184579.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.96E-09	8.49E-07	2.28E-07	1.081837	0.004
649089.27	4184599.61	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.97E-09	1.16E-06	3.01E-07	1.466343	0.005
649109.27	4184599.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.98E-09	1.08E-06	2.82E-07	1.368364	0.005
649129.27	4184599.61	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.98E-09	1.01E-06	2.66E-07	1.281901	0.005
649149.27	4184599.61	0.000	0.000	0.000	0.006	0.002	0.004	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.99E-09	9.48E-07	2.51E-07	1.204403	0.004
649169.27	4184599.61	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	4.99E-09	8.92E-07	2.37E-07	1.134189	0.004
649189.27	4184599.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	5.00E-09	8.41E-07	2.25E-07	1.070566	0.004
649209.27	4184599.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	5.00E-09	7.94E-07	2.14E-07	1.012728	0.004
649089.27	4184619.61	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	1.06E-06	2.77E-07	1.343506	0.005
649109.27	4184619.61	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	9.95E-07	2.61E-07	1.261061	0.005
649129.27	4184619.61	0.000	0.000	0.000	0.006	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	9.36E-07	2.47E-07	1.187638	0.004
649149.27	4184619.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	5.03E-09	8.82E-07	2.34E-07	1.121027	0.004
649169.27	4184619.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	5.04E-09	8.33E-07	2.22E-07	1.059912	0.004
649189.27	4184619.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	5.04E-09	7.88E-07	2.11E-07	1.004134	0.004
649209.27	4184619.61	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	5.04E-09	7.47E-07	2.01E-07	0.953653	0.003
649089.27	4184639.61	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	9.84E-07	2.57E-07	1.245922	0.005
649109.27	4184639.61	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	9.26E-07	2.43E-07	1.174077	0.004
649129.27	4184639.61	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	8.73E-07	2.31E-07	1.109356	0.004
649149.27	4184639.61	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	8.26E-07	2.20E-07	1.05081	0.004
649169.27	4184639.61	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	7.82E-07	2.09E-07	0.996863	0.004
649189.27	4184639.61	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	7.43E-07	2.00E-07	0.947451	0.003
649209.27	4184639.61	0.000	0.000	0.000	0.004	0.002	0.003	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	7.06E-07	1.91E-07	0.902181	0.003
648820.48	4184668.02	0.000	0.000	0.000	0.017	0.006	0.013	0.053	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.95E-09	2.91E-06	7.34E-07	3.644974	0.014

648840.48	4184668.02	0.000	0.000	0.000	0.014	0.005	0.011	0.046	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.96E-09	2.51E-06	6.31E-07	3.145359	0.012
648860.48	4184668.02	0.000	0.000	0.000	0.012	0.005	0.010	0.041	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	2.21E-06	5.56E-07	2.77279	0.011
648880.48	4184668.02	0.000	0.000	0.000	0.011	0.004	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.99E-09	1.98E-06	4.97E-07	2.482454	0.009
648900.48	4184668.02	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	1.79E-06	4.51E-07	2.246976	0.009
648920.48	4184668.02	0.000	0.000	0.000	0.009	0.003	0.007	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.63E-06	4.12E-07	2.049833	0.008
648940.48	4184668.02	0.000	0.000	0.000	0.008	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	1.50E-06	3.79E-07	1.882791	0.007
648960.48	4184668.02	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.38E-06	3.51E-07	1.737846	0.007
648980.48	4184668.02	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.28E-06	3.26E-07	1.610711	0.006
649000.48	4184668.02	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.19E-06	3.05E-07	1.498207	0.006
649020.48	4184668.02	0.000	0.000	0.000	0.006	0.002	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.11E-06	2.86E-07	1.398516	0.005
649040.48	4184668.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.04E-06	2.69E-07	1.310129	0.005
649060.48	4184668.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	9.73E-07	2.54E-07	1.23149	0.005
649080.48	4184668.02	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	9.16E-07	2.40E-07	1.161103	0.004
649100.48	4184668.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	8.66E-07	2.28E-07	1.098905	0.004
649120.48	4184668.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	8.20E-07	2.17E-07	1.042216	0.004
649140.48	4184668.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	7.78E-07	2.07E-07	0.990301	0.004
649160.48	4184668.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	7.39E-07	1.98E-07	0.942338	0.003
649180.48	4184668.02	0.000	0.000	0.000	0.004	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	7.04E-07	1.89E-07	0.898003	0.003
649200.48	4184668.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	6.71E-07	1.81E-07	0.857228	0.003
649220.48	4184668.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	6.41E-07	1.74E-07	0.819794	0.003
648800.48	4184688.02	0.000	0.000	0.000	0.016	0.006	0.012	0.050	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.98E-09	2.76E-06	6.96E-07	3.460419	0.013
648820.48	4184688.02	0.000	0.000	0.000	0.014	0.005	0.011	0.044	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.99E-09	2.41E-06	6.05E-07	3.019639	0.012
648840.48	4184688.02	0.000	0.000	0.000	0.012	0.005	0.009	0.039	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.00E-09	2.14E-06	5.36E-07	2.678384	0.010
648860.48	4184688.02	0.000	0.000	0.000	0.011	0.004	0.009	0.035	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	1.92E-06	4.83E-07	2.409648	0.009
648880.48	4184688.02	0.000	0.000	0.000	0.010	0.004	0.008	0.032	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	1.75E-06	4.39E-07	2.189528	0.008
648900.48	4184688.02	0.000	0.000	0.000	0.009	0.003	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.60E-06	4.03E-07	2.004626	0.008
648920.48	4184688.02	0.000	0.000	0.000	0.008	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.47E-06	3.72E-07	1.846658	0.007
648940.48	4184688.02	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	1.36E-06	3.45E-07	1.70966	0.006
648960.48	4184688.02	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.26E-06	3.22E-07	1.587503	0.006
648980.48	4184688.02	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.18E-06	3.01E-07	1.481798	0.006
649000.48	4184688.02	0.000	0.000	0.000	0.006	0.002	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.10E-06	2.83E-07	1.385797	0.005
649020.48	4184688.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.03E-06	2.66E-07	1.299854	0.005
649040.48	4184688.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	9.67E-07	2.52E-07	1.223587	0.005
649060.48	4184688.02	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	9.11E-07	2.38E-07	1.154601	0.004
649080.48	4184688.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	8.61E-07	2.27E-07	1.092773	0.004
649100.48	4184688.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	8.16E-07	2.16E-07	1.037492	0.004
649120.48	4184688.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	7.75E-07	2.06E-07	0.986766	0.004
649140.48	4184688.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	7.38E-07	1.97E-07	0.940006	0.003
649160.48	4184688.02	0.000	0.000	0.000	0.004	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	7.03E-07	1.89E-07	0.896525	0.003
649180.48	4184688.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	6.70E-07	1.81E-07	0.856097	0.003
649200.48	4184688.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	6.40E-07	1.73E-07	0.818706	0.003
649220.48	4184688.02	0.000	0.000	0.000	0.004	0.001	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	6.13E-07	1.66E-07	0.784167	0.003
648780.48	4184708.02	0.000	0.000	0.000	0.015	0.006	0.012	0.048	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.01E-09	2.62E-06	6.62E-07	3.291256	0.013
648800.48	4184708.02	0.000	0.000	0.000	0.013	0.005	0.010	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.02E-09	2.32E-06	5.82E-07	2.904984	0.011
648820.48	4184708.02	0.000	0.000	0.000	0.012	0.004	0.009	0.038	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.03E-09	2.07E-06	5.20E-07	2.597283	0.010
648840.48	4184708.02	0.000	0.000	0.000	0.010	0.004	0.008	0.034	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	1.87E-06	4.70E-07	2.348004	0.009
648860.48	4184708.02	0.000	0.000	0.000	0.010	0.004	0.008	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	1.71E-06	4.30E-07	2.141554	0.008
648880.48	4184708.02	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.57E-06	3.95E-07	1.966465	0.007
648900.48	4184708.02	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.44E-06	3.66E-07	1.815585	0.007
648920.48	4184708.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.34E-06	3.40E-07	1.685728	0.006
648940.48	4184708.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.25E-06	3.18E-07	1.570506	0.006
648960.48	4184708.02	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.16E-06	2.98E-07	1.46622	0.006
648980.48	4184708.02	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.09E-06	2.80E-07	1.375121	0.005
649000.48	4184708.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.02E-06	2.64E-07	1.292231	0.005
649020.48	4184708.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	9.62E-07	2.50E-07	1.216919	0.005
649040.48	4184708.02	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	9.08E-07	2.37E-07	1.149867	0.004
649060.48	4184708.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	8.58E-07	2.25E-07	1.088407	0.004
649080.48	4184708.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	8.14E-07	2.15E-07	1.034025	0.004
649100.48	4184708.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	7.74E-07	2.05E-07	0.984282	0.004
649120.48	4184708.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	7.37E-07	1.97E-07	0.938408	0.003
649140.48	4184708.02	0.000	0.000	0.000	0.004	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	7.02E-07	1.88E-07	0.895375	0.003
649160.48	4184708.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	6.70E-07	1.81E-07	0.855545	0.003
649180.48	4184708.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	6.40E-07	1.73E-07	0.818668	0.003
649200.48	4184708.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	6.12E-07	1.66E-07	0.784104	0.003
649220.48	4184708.02	0.000	0.000	0.000	0.004	0.001	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	5.87E-07	1.60E-07	0.752167	0.003
648760.48	4184728.02	0.000	0.000	0.000	0.014	0.005	0.011	0.046	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.04E-09	2.52E-06	6.35E-07	3.163895	0.012
648780.48	4184728.02	0.000	0.000	0.000	0.013	0.005	0.010	0.041	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.05E-09	2.24E-06	5.63E-07	2.809226	0.011
648800.48	4184728.02	0.000	0.000	0.000	0.011	0.004	0.009	0.037	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.06E-09	2.02E-06	5.07E-07	2.532507	0.010
648820.48	4184728.02	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	1.84E-06	4.61E-07	2.301294	0.009
648840.48	4184728.02	0.000	0.000	0.000	0.009	0.004	0.007	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	1.68E-06	4.22E-07	2.104682	0.008
648860.48	4184728.02	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	1.54E-06	3.90E-07	1.939302	0.007
648880.48	4184728.02	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.43E-06	3.62E-07	1.795559	0.007
648900.48	4184728.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.33E-06	3.37E-07	1.669769	0.006
648920.48	4184728.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.24E-06	3.16E-07	1.558528	0.006
648940.48	4184728.02	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.16E-06	2.96E-07	1.45889	0.005
648960.48	4184728.02	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.08E-06	2.79E-07	1.369063	0.005
648980.48	4184728.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.02E-06	2.63E-07	1.287831	0.005
649000.48	4184728.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	9.60E-07	2.49E-07	1.214494	0.005
649020.48	4184728.02	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	9.06E-07	2.37E-07	1.147916	0.004
649040.48	4184728.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	8.57E-07	2.25E-07	1.087126	0.004
649060.48	4184728.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	8.12E-07	2.14E-07	1.031425	0.004
649080.48	4184728.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	7.73E-07	2.05E-07	0.983043	0.004
649100.48	4184728.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	7.36E-07	1.96E-07	0.93781	0.003
649120.48	4184728.02	0.000	0.000	0.000	0.004	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	7.02E-07	1.88E-07	0.895886	0.003
649140.48	4184728.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	6.70E-07	1.81E-07	0.856322	0.003
649160.48	4184728.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	6.41E-07	1.73E-07	0.819961	0.003
649180.48	4184728.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	6.14E-07	1.67E-07	0.785859	0.003
649200.48	4184728.02	0.000	0.000	0.000	0.004	0.001	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.28E-09	5.88E-07	1.60E-07	0.753919	0.003
649220.48	4184728.02	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	5.65E-07	1.54E-07	0.724109	0.003
648740.48	4184748.02	0.000	0.000	0.000	0.014	0.005	0.011	0.045	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.07E-09	2.48E-06	6.23E-07	3.110163	0.012
648760.48	4184748.02	0.000	0.000	0.000	0.012	0.005	0.010	0.041	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.08E-09	2.22E-06	5.56E-07	2.777643	0.011
648780.48	4184748.02	0.000	0.000	0.000	0.011	0.004	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.09E-09	2.00E-06	5.01E-07	2.504036	0.010
648800.48	4184748.02	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	1.81E-06	4.56E-07	2.274967	0.009
648820.48	4184748.02	0.000	0.000	0.000	0.009	0.004	0.007	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	1.66E-06	4.19E-07	2.086721	0.008
648840.48	4184748.02	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.53E-06	3.87E-07	1.926933	0.007
648860.48	4184748.02	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	1.42E-06	3.60E-07	1.785966	0.007
648880.48	4184748.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.32E-06	3.36E-07	1.662589	0.006
648900.48	4184748.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.23E-06	3.15E-07	1.553305	0.006
648920.48	4184748.02	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.15E-06	2.96E-07	1.45556	0.005
648940.48	4184748.02	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.08E-06	2.79E-07	1.367423	0.005
648960.48	4184748.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.02E-06	2.63E-07	1.287415	0.005

648980.48	4184748.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	9.60E-07	2.49E-07	1.214721	0.005
649000.48	4184748.02	0.000	0.000	0.000	0.005	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	9.07E-07	2.37E-07	1.148703	0.004
649020.48	4184748.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	8.58E-07	2.25E-07	1.088789	0.004
649040.48	4184748.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	8.14E-07	2.15E-07	1.034145	0.004
649060.48	4184748.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.28E-09	7.73E-07	2.05E-07	0.98328	0.004
649080.48	4184748.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	7.37E-07	1.96E-07	0.938508	0.003
649100.48	4184748.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	7.03E-07	1.88E-07	0.896886	0.003
649120.48	4184748.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.30E-09	6.72E-07	1.81E-07	0.858208	0.003
649140.48	4184748.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-09	6.43E-07	1.74E-07	0.821685	0.003
649160.48	4184748.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.32E-09	6.16E-07	1.67E-07	0.787959	0.003
649180.48	4184748.02	0.000	0.000	0.000	0.004	0.001	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.32E-09	5.90E-07	1.61E-07	0.756138	0.003
649200.48	4184748.02	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.33E-09	5.66E-07	1.55E-07	0.726323	0.003
649220.48	4184748.02	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.33E-09	5.44E-07	1.49E-07	0.698431	0.003
648720.48	4184768.02	0.000	0.000	0.000	0.014	0.005	0.011	0.046	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.10E-09	2.53E-06	6.35E-07	3.171258	0.012
648740.48	4184768.02	0.000	0.000	0.000	0.013	0.005	0.010	0.041	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.11E-09	2.24E-06	5.62E-07	2.811752	0.011
648760.48	4184768.02	0.000	0.000	0.000	0.011	0.004	0.009	0.037	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.12E-09	2.02E-06	5.05E-07	2.525335	0.010
648780.48	4184768.02	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.13E-09	1.83E-06	4.59E-07	2.293564	0.009
648800.48	4184768.02	0.000	0.000	0.000	0.009	0.004	0.007	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	1.67E-06	4.21E-07	2.097915	0.008
648820.48	4184768.02	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.54E-06	3.89E-07	1.932552	0.007
648840.48	4184768.02	0.000	0.000	0.000	0.008	0.003	0.006	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	1.43E-06	3.61E-07	1.792237	0.007
648860.48	4184768.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.33E-06	3.37E-07	1.667911	0.006
648880.48	4184768.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.24E-06	3.16E-07	1.558085	0.006
648900.48	4184768.02	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	1.16E-06	2.97E-07	1.460104	0.005
648920.48	4184768.02	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	1.09E-06	2.80E-07	1.371861	0.005
648940.48	4184768.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	1.02E-06	2.64E-07	1.291853	0.005
648960.48	4184768.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	9.64E-07	2.50E-07	1.219022	0.005
648980.48	4184768.02	0.000	0.000	0.000	0.006	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	9.10E-07	2.37E-07	1.152789	0.004
649000.48	4184768.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	8.62E-07	2.26E-07	1.092581	0.004
649020.48	4184768.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.30E-09	8.17E-07	2.15E-07	1.037688	0.004
649040.48	4184768.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-09	7.77E-07	2.06E-07	0.987461	0.004
649060.48	4184768.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.33E-09	7.39E-07	1.97E-07	0.940623	0.003
649080.48	4184768.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.33E-09	7.05E-07	1.89E-07	0.899178	0.003
649100.48	4184768.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.34E-09	6.74E-07	1.81E-07	0.860546	0.003
649120.48	4184768.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.35E-09	6.45E-07	1.74E-07	0.824537	0.003
649140.48	4184768.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.36E-09	6.18E-07	1.68E-07	0.790629	0.003
649160.48	4184768.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.36E-09	5.92E-07	1.61E-07	0.759083	0.003
649180.48	4184768.02	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-09	5.68E-07	1.55E-07	0.729228	0.003
649200.48	4184768.02	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-09	5.46E-07	1.50E-07	0.701252	0.003
649220.48	4184768.02	0.000	0.000	0.000	0.004	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.38E-09	5.25E-07	1.44E-07	0.675098	0.002
648720.48	4184788.02	0.000	0.000	0.000	0.013	0.005	0.010	0.043	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.14E-09	2.36E-06	5.89E-07	2.949667	0.011
648740.48	4184788.02	0.000	0.000	0.000	0.012	0.004	0.009	0.038	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.15E-09	2.09E-06	5.23E-07	2.620513	0.010
648760.48	4184788.02	0.000	0.000	0.000	0.011	0.004	0.008	0.034	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.16E-09	1.88E-06	4.72E-07	2.360924	0.009
648780.48	4184788.02	0.000	0.000	0.000	0.010	0.004	0.008	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	1.71E-06	4.31E-07	2.147945	0.008
648800.48	4184788.02	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.57E-06	3.96E-07	1.971723	0.007
648820.48	4184788.02	0.000	0.000	0.000	0.008	0.003	0.007	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.20E-09	1.45E-06	3.67E-07	1.820826	0.007
648840.48	4184788.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	1.34E-06	3.41E-07	1.68958	0.006
648860.48	4184788.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	1.25E-06	3.19E-07	1.576357	0.006
648880.48	4184788.02	0.000	0.000	0.000	0.007	0.003	0.005	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	1.17E-06	3.00E-07	1.475331	0.006
648900.48	4184788.02	0.000	0.000	0.000	0.007	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	1.10E-06	2.82E-07	1.384719	0.005
648920.48	4184788.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.28E-09	1.03E-06	2.66E-07	1.30269	0.005
648940.48	4184788.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	9.71E-07	2.52E-07	1.228591	0.005
648960.48	4184788.02	0.000	0.000	0.000	0.006	0.002	0.004	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-09	9.17E-07	2.39E-07	1.161338	0.004
648980.48	4184788.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.32E-09	8.67E-07	2.27E-07	1.09987	0.004
649000.48	4184788.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.34E-09	8.22E-07	2.17E-07	1.043877	0.004
649020.48	4184788.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.35E-09	7.81E-07	2.07E-07	0.992761	0.004
649040.48	4184788.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.36E-09	7.43E-07	1.98E-07	0.945928	0.003
649060.48	4184788.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-09	7.08E-07	1.89E-07	0.902671	0.003
649080.48	4184788.02	0.000	0.000	0.000	0.004	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.38E-09	6.77E-07	1.82E-07	0.863902	0.003
649100.48	4184788.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.39E-09	6.48E-07	1.75E-07	0.827909	0.003
649120.48	4184788.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.40E-09	6.20E-07	1.68E-07	0.794302	0.003
649140.48	4184788.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.41E-09	5.95E-07	1.62E-07	0.76237	0.003
649160.48	4184788.02	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.41E-09	5.71E-07	1.56E-07	0.732831	0.003
649180.48	4184788.02	0.000	0.000	0.000	0.004	0.001	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	5.49E-07	1.51E-07	0.704713	0.003
649200.48	4184788.02	0.000	0.000	0.000	0.004	0.001	0.003	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	5.28E-07	1.45E-07	0.678313	0.002
648700.48	4184808.02	0.000	0.000	0.000	0.014	0.005	0.011	0.047	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.17E-09	2.57E-06	6.42E-07	3.214722	0.012
648720.48	4184808.02	0.000	0.000	0.000	0.012	0.005	0.010	0.041	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.18E-09	2.24E-06	5.59E-07	2.801907	0.011
648740.48	4184808.02	0.000	0.000	0.000	0.011	0.004	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.19E-09	1.99E-06	4.98E-07	2.491994	0.009
648760.48	4184808.02	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	1.79E-06	4.50E-07	2.247586	0.009
648780.48	4184808.02	0.000	0.000	0.000	0.009	0.003	0.007	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.22E-09	1.63E-06	4.10E-07	2.045873	0.008
648800.48	4184808.02	0.000	0.000	0.000	0.009	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	1.49E-06	3.78E-07	1.877395	0.007
648820.48	4184808.02	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	1.38E-06	3.50E-07	1.735001	0.007
648840.48	4184808.02	0.000	0.000	0.000	0.007	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	1.28E-06	3.26E-07	1.612384	0.006
648860.48	4184808.02	0.000	0.000	0.000	0.007	0.003	0.006	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.28E-09	1.19E-06	3.06E-07	1.504049	0.006
648880.48	4184808.02	0.000	0.000	0.000	0.007	0.003	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	1.12E-06	2.87E-07	1.408744	0.005
648900.48	4184808.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-09	1.05E-06	2.71E-07	1.323335	0.005
648920.48	4184808.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.32E-09	9.85E-07	2.56E-07	1.246297	0.005
648940.48	4184808.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.34E-09	9.29E-07	2.42E-07	1.176293	0.004
648960.48	4184808.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.36E-09	8.77E-07	2.30E-07	1.112666	0.004
648980.48	4184808.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-09	8.30E-07	2.19E-07	1.054188	0.004
649000.48	4184808.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.38E-09	7.88E-07	2.09E-07	1.002398	0.004
649020.48	4184808.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.40E-09	7.49E-07	1.99E-07	0.954307	0.003
649040.48	4184808.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.41E-09	7.14E-07	1.91E-07	0.910316	0.003
649060.48	4184808.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	6.81E-07	1.83E-07	0.869354	0.003
649080.48	4184808.02	0.000	0.000	0.000	0.004	0.002	0.003	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.43E-09	6.51E-07	1.76E-07	0.83272	0.003
649100.48	4184808.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.44E-09	6.24E-07	1.69E-07	0.798563	0.003
649120.48	4184808.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.45E-09	5.98E-07	1.63E-07	0.766713	0.003
649140.48	4184808.02	0.000	0.000	0.000	0.004	0.002	0.003	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.46E-09	5.74E-07	1.57E-07	0.73665	0.003
648700.48	4184828.02	0.000	0.000	0.000	0.014	0.005	0.011	0.045	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.21E-09	2.47E-06	6.18E-07	3.09272	0.012
648720.48	4184828.02	0.000	0.000	0.000	0.012	0.005	0.010	0.039	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.23E-09	2.16E-06	5.40E-07	2.706143	0.010
648740.48	4184828.02	0.000	0.000	0.000	0.011	0.004	0.009	0.035	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.24E-09	1.92E-06	4.81E-07	2.405475	0.009
648760.48	4184828.02	0.000	0.000	0.000	0.010	0.004	0.008	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.25E-09	1.73E-06	4.34E-07	2.167028	0.008
648780.48	4184828.02	0.000	0.000	0.000	0.009	0.003	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	1.57E-06	3.96E-07	1.969783	0.007
648800.48	4184828.02	0.000	0.000	0.000	0.008	0.003	0.007	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	1.44E-06	3.64E-07	1.807028	0.007
648820.48	4184828.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	1.33E-06	3.38E-07	1.669133	0.006
648840.48	4184828.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-09	1.23E-06	3.15E-07	1.551708	0.006
648860.48	4184828.02	0.000	0.000	0.000	0.007	0.003	0.005	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.32E-09	1.15E-06	2.95E-07	1.447665	0.005
648880.48	4184828.02	0.000	0.000	0.000	0.006	0.002	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.34E-09	1.07E-06	2.77E-07	1.355307	0.005
648900.48	4184828.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.35E-09	1.01E-06	2.61E-07	1.273001	0.005
648920.48	4184828.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-09	9.46E-07	2.47E-07	1.198652	0.004
648940.48	4184828.02	0.000	0.000	0.000	0.006	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.39E-09	8.92E-07	2.34E-07	1.131584	0.004
648960.48	4184828.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.40E-09	8.43E-07	2.22E-07	1.0709	0.004

648980.48	4184828.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	7.99E-07	2.11E-07	1.015392	0.004
649000.48	4184828.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.43E-09	7.59E-07	2.02E-07	0.965962	0.004
649020.48	4184828.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.44E-09	7.22E-07	1.93E-07	0.920366	0.003
649040.48	4184828.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.46E-09	6.88E-07	1.85E-07	0.878574	0.003
649060.48	4184828.02	0.000	0.000	0.000	0.004	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.47E-09	6.57E-07	1.78E-07	0.839518	0.003
649080.48	4184828.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.48E-09	6.29E-07	1.71E-07	0.805066	0.003
649100.48	4184828.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.49E-09	6.03E-07	1.64E-07	0.772548	0.003
648700.48	4184848.02	0.000	0.000	0.000	0.013	0.005	0.011	0.044	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.26E-09	2.40E-06	6.01E-07	3.007773	0.011
648720.48	4184848.02	0.000	0.000	0.000	0.012	0.004	0.009	0.038	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.27E-09	2.10E-06	5.25E-07	2.629891	0.010
648740.48	4184848.02	0.000	0.000	0.000	0.011	0.004	0.008	0.034	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.28E-09	1.87E-06	4.69E-07	2.342399	0.009
648760.48	4184848.02	0.000	0.000	0.000	0.010	0.004	0.008	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	1.68E-06	4.23E-07	2.10641	0.008
648780.48	4184848.02	0.000	0.000	0.000	0.009	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-09	1.52E-06	3.85E-07	1.913215	0.007
648800.48	4184848.02	0.000	0.000	0.000	0.008	0.003	0.006	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.32E-09	1.39E-06	3.54E-07	1.753273	0.007
648820.48	4184848.02	0.000	0.000	0.000	0.008	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.34E-09	1.29E-06	3.28E-07	1.619037	0.006
648840.48	4184848.02	0.000	0.000	0.000	0.007	0.003	0.006	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.35E-09	1.19E-06	3.06E-07	1.50341	0.006
648860.48	4184848.02	0.000	0.000	0.000	0.007	0.003	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-09	1.11E-06	2.86E-07	1.401002	0.005
648880.48	4184848.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.39E-09	1.04E-06	2.69E-07	1.310807	0.005
648900.48	4184848.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.40E-09	9.71E-07	2.53E-07	1.230159	0.005
648920.48	4184848.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	9.13E-07	2.39E-07	1.157767	0.004
648940.48	4184848.02	0.000	0.000	0.000	0.005	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.43E-09	8.61E-07	2.27E-07	1.092974	0.004
648960.48	4184848.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.45E-09	8.14E-07	2.15E-07	1.034492	0.004
648980.48	4184848.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.47E-09	7.71E-07	2.05E-07	0.981382	0.004
649000.48	4184848.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.48E-09	7.32E-07	1.96E-07	0.933545	0.003
649020.48	4184848.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.49E-09	6.97E-07	1.88E-07	0.889929	0.003
649040.48	4184848.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.51E-09	6.65E-07	1.80E-07	0.849955	0.003
649060.48	4184848.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.52E-09	6.35E-07	1.73E-07	0.812649	0.003
649080.48	4184848.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.53E-09	6.08E-07	1.66E-07	0.779688	0.003
648680.48	4184868.02	0.000	0.000	0.000	0.016	0.006	0.013	0.051	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.29E-09	2.77E-06	6.97E-07	3.476359	0.013
648700.48	4184868.02	0.000	0.000	0.000	0.013	0.005	0.011	0.043	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.30E-09	2.36E-06	5.91E-07	2.957798	0.011
648720.48	4184868.02	0.000	0.000	0.000	0.012	0.004	0.009	0.038	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.31E-09	2.06E-06	5.17E-07	2.583441	0.010
648740.48	4184868.02	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.33E-09	1.83E-06	4.61E-07	2.298335	0.009
648760.48	4184868.02	0.000	0.000	0.000	0.009	0.004	0.007	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.34E-09	1.64E-06	4.14E-07	2.061007	0.008
648780.48	4184868.02	0.000	0.000	0.000	0.009	0.003	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.35E-09	1.49E-06	3.77E-07	1.870023	0.007
648800.48	4184868.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.37E-09	1.36E-06	3.47E-07	1.7116	0.006
648820.48	4184868.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.39E-09	1.25E-06	3.21E-07	1.579433	0.006
648840.48	4184868.02	0.000	0.000	0.000	0.007	0.003	0.006	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.40E-09	1.16E-06	2.99E-07	1.462736	0.005
648860.48	4184868.02	0.000	0.000	0.000	0.007	0.003	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	1.08E-06	2.79E-07	1.361393	0.005
648880.48	4184868.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.44E-09	1.01E-06	2.62E-07	1.273059	0.005
648900.48	4184868.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.45E-09	9.41E-07	2.47E-07	1.193416	0.004
648920.48	4184868.02	0.000	0.000	0.000	0.006	0.002	0.004	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.47E-09	8.84E-07	2.33E-07	1.122108	0.004
648940.48	4184868.02	0.000	0.000	0.000	0.005	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.48E-09	8.33E-07	2.21E-07	1.058954	0.004
648960.48	4184868.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.50E-09	7.87E-07	2.10E-07	1.002229	0.004
648980.48	4184868.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.52E-09	7.46E-07	2.00E-07	0.950926	0.003
649000.48	4184868.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.53E-09	7.08E-07	1.91E-07	0.904499	0.003
649020.48	4184868.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.54E-09	6.74E-07	1.83E-07	0.862477	0.003
649040.48	4184868.02	0.000	0.000	0.000	0.004	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.56E-09	6.43E-07	1.75E-07	0.82403	0.003
649060.48	4184868.02	0.000	0.000	0.000	0.004	0.002	0.003	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.57E-09	6.15E-07	1.68E-07	0.788406	0.003
648680.48	4184888.02	0.000	0.000	0.000	0.016	0.006	0.012	0.050	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.34E-09	2.75E-06	6.92E-07	3.448404	0.013
648700.48	4184888.02	0.000	0.000	0.000	0.013	0.005	0.011	0.043	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.35E-09	2.34E-06	5.88E-07	2.938002	0.011
648720.48	4184888.02	0.000	0.000	0.000	0.012	0.004	0.009	0.037	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.36E-09	2.04E-06	5.12E-07	2.557776	0.010
648740.48	4184888.02	0.000	0.000	0.000	0.010	0.004	0.008	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.38E-09	1.81E-06	4.55E-07	2.26775	0.009
648760.48	4184888.02	0.000	0.000	0.000	0.009	0.004	0.007	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.39E-09	1.61E-06	4.08E-07	2.026709	0.008
648780.48	4184888.02	0.000	0.000	0.000	0.009	0.003	0.007	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.40E-09	1.46E-06	3.71E-07	1.836432	0.007
648800.48	4184888.02	0.000	0.000	0.000	0.008	0.003	0.006	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	1.33E-06	3.41E-07	1.67823	0.006
648820.48	4184888.02	0.000	0.000	0.000	0.007	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.44E-09	1.22E-06	3.15E-07	1.545464	0.006
648840.48	4184888.02	0.000	0.000	0.000	0.007	0.003	0.006	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.45E-09	1.13E-06	2.93E-07	1.427889	0.005
648860.48	4184888.02	0.000	0.000	0.000	0.007	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.46E-09	1.05E-06	2.73E-07	1.32682	0.005
648880.48	4184888.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.48E-09	9.77E-07	2.56E-07	1.239122	0.005
648900.48	4184888.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.50E-09	9.14E-07	2.41E-07	1.160773	0.004
648920.48	4184888.02	0.000	0.000	0.000	0.006	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.52E-09	8.57E-07	2.27E-07	1.090205	0.004
648940.48	4184888.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.53E-09	8.08E-07	2.15E-07	1.028335	0.004
648960.48	4184888.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.55E-09	7.63E-07	2.05E-07	0.973086	0.004
648980.48	4184888.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.57E-09	7.23E-07	1.95E-07	0.923302	0.003
649000.48	4184888.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.58E-09	6.86E-07	1.86E-07	0.878127	0.003
649020.48	4184888.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.60E-09	6.54E-07	1.78E-07	0.837387	0.003
649040.48	4184888.02	0.000	0.000	0.000	0.004	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.61E-09	6.24E-07	1.71E-07	0.800284	0.003
648680.48	4184908.02	0.000	0.000	0.000	0.016	0.006	0.012	0.050	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.39E-09	2.75E-06	6.92E-07	3.446967	0.013
648700.48	4184908.02	0.000	0.000	0.000	0.013	0.005	0.011	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.40E-09	2.33E-06	5.86E-07	2.925204	0.011
648720.48	4184908.02	0.000	0.000	0.000	0.012	0.004	0.009	0.037	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.41E-09	2.03E-06	5.10E-07	2.541603	0.010
648740.48	4184908.02	0.000	0.000	0.000	0.010	0.004	0.008	0.032	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.42E-09	1.79E-06	4.52E-07	2.246064	0.009
648760.48	4184908.02	0.000	0.000	0.000	0.009	0.004	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.43E-09	1.59E-06	4.04E-07	2.000857	0.008
648780.48	4184908.02	0.000	0.000	0.000	0.009	0.003	0.007	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.45E-09	1.44E-06	3.67E-07	1.80841	0.007
648800.48	4184908.02	0.000	0.000	0.000	0.008	0.003	0.006	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.47E-09	1.31E-06	3.36E-07	1.649338	0.006
648820.48	4184908.02	0.000	0.000	0.000	0.007	0.003	0.006	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.49E-09	1.20E-06	3.10E-07	1.515017	0.006
648840.48	4184908.02	0.000	0.000	0.000	0.007	0.003	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.50E-09	1.10E-06	2.87E-07	1.396858	0.005
648860.48	4184908.02	0.000	0.000	0.000	0.006	0.002	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.52E-09	1.02E-06	2.68E-07	1.29582	0.005
648880.48	4184908.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.54E-09	9.52E-07	2.51E-07	1.208242	0.004
648900.48	4184908.02	0.000	0.000	0.000	0.006	0.002	0.005	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.56E-09	8.89E-07	2.36E-07	1.130766	0.004
648920.48	4184908.02	0.000	0.000	0.000	0.006	0.002	0.004	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.57E-09	8.33E-07	2.22E-07	1.061176	0.004
648940.48	4184908.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.59E-09	7.84E-07	2.10E-07	1.000297	0.004
648960.48	4184908.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.60E-09	7.41E-07	2.00E-07	0.946266	0.003
648980.48	4184908.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.62E-09	7.02E-07	1.91E-07	0.897734	0.003
649000.48	4184908.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.63E-09	6.66E-07	1.82E-07	0.853581	0.003
649020.48	4184908.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.65E-09	6.34E-07	1.74E-07	0.814224	0.003
648680.48	4184928.02	0.000	0.000	0.000	0.016	0.006	0.013	0.050	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.43E-09	2.77E-06	6.99E-07	3.473605	0.013
648700.48	4184928.02	0.000	0.000	0.000	0.013	0.005	0.011	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.44E-09	2.34E-06	5.88E-07	2.929942	0.011
648720.48	4184928.02	0.000	0.000	0.000	0.012	0.004	0.009	0.037	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.46E-09	2.02E-06	5.10E-07	2.536099	0.010
648740.48	4184928.02	0.000	0.000	0.000	0.010	0.004	0.008	0.032	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.47E-09	1.78E-06	4.50E-07	2.230642	0.008
648760.48	4184928.02	0.000	0.000	0.000	0.009	0.004	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.48E-09	1.57E-06	4.01E-07	1.980275	0.007
648780.48	4184928.02	0.000	0.000	0.000	0.009	0.003	0.007	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.50E-09	1.42E-06	3.63E-07	1.783635	0.007
648800.48	4184928.02	0.000	0.000	0.000	0.008	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.52E-09	1.28E-06	3.32E-07	1.622248	0.006
648820.48	4184928.02	0.000	0.000	0.000	0.007	0.003	0.006	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.54E-09	1.18E-06	3.06E-07	1.486218	0.006
648840.48	4184928.02	0.000	0.000	0.000	0.007	0.003	0.005	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.55E-09	1.08E-06	2.83E-07	1.367272	0.005
648860.48	4184928.02	0.000	0.000	0.000	0.006	0.002	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.57E-09	9.98E-07	2.63E-07	1.266301	0.005
648880.48	4184928.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.59E-09	9.27E-07	2.46E-07	1.17896	0.004
648900.48	4184928.02	0.000	0.000	0.000	0.006	0.002	0.005	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.61E-09	8.65E-07	2.31E-07	1.102173	0.004
648920.48	4184928.02	0.000	0.000	0.000	0.006	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.62E-09	8.10E-07	2.18E-07	1.033776	0.004
648940.48	4184928.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.64E-09	7.62E-07	2.06E-07	0.97393	0.004
648960.48	4184928.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.66E-09	7.20E-07	1.96E-07	0.921116	0.003
648980.48	4184928.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.68E-09	6.82E-07	1.87E-07	0.873762	0.003
649000.48	4184928.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.69E-09	6.47E-07	1.78E-07	0.830814	0.003

649020.48	4184928.02	0.000	0.000	0.000	0.004	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.71E-09	6.16E-07	1.70E-07	0.792566	0.003
648680.48	4184948.02	0.000	0.000	0.000	0.016	0.006	0.013	0.051	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.48E-09	2.81E-06	7.11E-07	3.522525	0.013
648700.48	4184948.02	0.000	0.000	0.000	0.014	0.005	0.011	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.49E-09	2.35E-06	5.93E-07	2.946903	0.011
648720.48	4184948.02	0.000	0.000	0.000	0.012	0.004	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.51E-09	2.01E-06	5.10E-07	2.530032	0.010
648740.48	4184948.02	0.000	0.000	0.000	0.010	0.004	0.008	0.032	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.53E-09	1.76E-06	4.49E-07	2.216975	0.008
648760.48	4184948.02	0.000	0.000	0.000	0.009	0.004	0.007	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.54E-09	1.56E-06	3.99E-07	1.962176	0.007
648780.48	4184948.02	0.000	0.000	0.000	0.009	0.003	0.007	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.55E-09	1.39E-06	3.60E-07	1.759555	0.007
648800.48	4184948.02	0.000	0.000	0.000	0.008	0.003	0.006	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.57E-09	1.26E-06	3.28E-07	1.595056	0.006
648820.48	4184948.02	0.000	0.000	0.000	0.007	0.003	0.006	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.59E-09	1.15E-06	3.01E-07	1.45734	0.005
648840.48	4184948.02	0.000	0.000	0.000	0.007	0.003	0.005	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.60E-09	1.05E-06	2.78E-07	1.33766	0.005
648860.48	4184948.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.62E-09	9.73E-07	2.58E-07	1.237051	0.005
648880.48	4184948.02	0.000	0.000	0.000	0.006	0.002	0.005	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.64E-09	9.03E-07	2.41E-07	1.150202	0.004
648900.48	4184948.02	0.000	0.000	0.000	0.006	0.002	0.005	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.66E-09	8.42E-07	2.27E-07	1.07434	0.004
648920.48	4184948.02	0.000	0.000	0.000	0.005	0.002	0.004	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.68E-09	7.88E-07	2.13E-07	1.007155	0.004
648940.48	4184948.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.70E-09	7.41E-07	2.02E-07	0.948822	0.003
648960.48	4184948.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.72E-09	7.00E-07	1.92E-07	0.897155	0.003
648980.48	4184948.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.74E-09	6.62E-07	1.83E-07	0.850882	0.003
649000.48	4184948.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.75E-09	6.29E-07	1.74E-07	0.809229	0.003
649020.48	4184948.02	0.000	0.000	0.000	0.004	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.77E-09	5.99E-07	1.67E-07	0.77201	0.003
648680.48	4184968.02	0.000	0.000	0.000	0.017	0.006	0.013	0.051	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.54E-09	2.85E-06	7.24E-07	3.577559	0.014
648700.48	4184968.02	0.000	0.000	0.000	0.014	0.005	0.011	0.043	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.55E-09	2.36E-06	5.99E-07	2.969852	0.011
648720.48	4184968.02	0.000	0.000	0.000	0.012	0.004	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.56E-09	2.01E-06	5.12E-07	2.529657	0.010
648740.48	4184968.02	0.000	0.000	0.000	0.010	0.004	0.008	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.58E-09	1.75E-06	4.47E-07	2.200061	0.008
648760.48	4184968.02	0.000	0.000	0.000	0.009	0.004	0.007	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.59E-09	1.54E-06	3.96E-07	1.941641	0.007
648780.48	4184968.02	0.000	0.000	0.000	0.009	0.003	0.007	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.61E-09	1.37E-06	3.56E-07	1.735304	0.007
648800.48	4184968.02	0.000	0.000	0.000	0.008	0.003	0.006	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.63E-09	1.24E-06	3.24E-07	1.566976	0.006
648820.48	4184968.02	0.000	0.000	0.000	0.007	0.003	0.006	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.64E-09	1.12E-06	2.97E-07	1.426744	0.005
648840.48	4184968.02	0.000	0.000	0.000	0.007	0.003	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.66E-09	1.03E-06	2.73E-07	1.308191	0.005
648860.48	4184968.02	0.000	0.000	0.000	0.006	0.002	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.68E-09	9.48E-07	2.54E-07	1.207454	0.004
648880.48	4184968.02	0.000	0.000	0.000	0.006	0.002	0.005	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.70E-09	8.79E-07	2.37E-07	1.121252	0.004
648900.48	4184968.02	0.000	0.000	0.000	0.006	0.002	0.005	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.72E-09	8.19E-07	2.22E-07	1.046619	0.004
648920.48	4184968.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.74E-09	7.66E-07	2.09E-07	0.981417	0.004
648940.48	4184968.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.76E-09	7.20E-07	1.98E-07	0.924263	0.003
648960.48	4184968.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.78E-09	6.80E-07	1.88E-07	0.873734	0.003
648980.48	4184968.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.80E-09	6.44E-07	1.79E-07	0.828748	0.003
649000.48	4184968.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.81E-09	6.11E-07	1.71E-07	0.788467	0.003
648680.48	4184988.02	0.000	0.000	0.000	0.017	0.006	0.014	0.051	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.59E-09	2.86E-06	7.30E-07	3.595718	0.014
648700.48	4184988.02	0.000	0.000	0.000	0.014	0.005	0.011	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.60E-09	2.36E-06	6.00E-07	2.963926	0.011
648720.48	4184988.02	0.000	0.000	0.000	0.012	0.005	0.009	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.61E-09	1.99E-06	5.10E-07	2.510299	0.010
648740.48	4184988.02	0.000	0.000	0.000	0.011	0.004	0.008	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.63E-09	1.72E-06	4.43E-07	2.172947	0.008
648760.48	4184988.02	0.000	0.000	0.000	0.009	0.004	0.007	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.64E-09	1.51E-06	3.92E-07	1.911201	0.007
648780.48	4184988.02	0.000	0.000	0.000	0.009	0.003	0.007	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.66E-09	1.35E-06	3.52E-07	1.702594	0.006
648800.48	4184988.02	0.000	0.000	0.000	0.008	0.003	0.006	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.68E-09	1.21E-06	3.19E-07	1.533581	0.006
648820.48	4184988.02	0.000	0.000	0.000	0.007	0.003	0.006	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.70E-09	1.10E-06	2.92E-07	1.393295	0.005
648840.48	4184988.02	0.000	0.000	0.000	0.007	0.003	0.005	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.72E-09	1.00E-06	2.68E-07	1.275328	0.005
648860.48	4184988.02	0.000	0.000	0.000	0.006	0.002	0.005	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.74E-09	9.21E-07	2.49E-07	1.175861	0.004
648880.48	4184988.02	0.000	0.000	0.000	0.006	0.002	0.005	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.76E-09	8.53E-07	2.32E-07	1.091113	0.004
648900.48	4184988.02	0.000	0.000	0.000	0.006	0.002	0.005	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.78E-09	7.95E-07	2.18E-07	1.018233	0.004
648920.48	4184988.02	0.000	0.000	0.000	0.005	0.002	0.004	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.80E-09	7.44E-07	2.05E-07	0.954943	0.003
648940.48	4184988.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.82E-09	6.99E-07	1.94E-07	0.899437	0.003
648960.48	4184988.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.84E-09	6.60E-07	1.85E-07	0.850667	0.003
648980.48	4184988.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.86E-09	6.25E-07	1.76E-07	0.807138	0.003
649000.48	4184988.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.87E-09	5.94E-07	1.68E-07	0.768018	0.003
648680.48	4185008.02	0.000	0.000	0.000	0.017	0.007	0.014	0.051	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.64E-09	2.85E-06	7.30E-07	3.582769	0.014
648700.48	4185008.02	0.000	0.000	0.000	0.014	0.005	0.011	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.65E-09	2.33E-06	5.97E-07	2.936383	0.011
648720.48	4185008.02	0.000	0.000	0.000	0.012	0.005	0.010	0.035	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.66E-09	1.96E-06	5.05E-07	2.475377	0.009
648740.48	4185008.02	0.000	0.000	0.000	0.011	0.004	0.008	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.68E-09	1.69E-06	4.38E-07	2.133525	0.008
648760.48	4185008.02	0.000	0.000	0.000	0.009	0.004	0.007	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.70E-09	1.48E-06	3.87E-07	1.870242	0.007
648780.48	4185008.02	0.000	0.000	0.000	0.009	0.003	0.007	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.72E-09	1.31E-06	3.46E-07	1.661649	0.006
648800.48	4185008.02	0.000	0.000	0.000	0.008	0.003	0.006	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.74E-09	1.18E-06	3.13E-07	1.494125	0.006
648820.48	4185008.02	0.000	0.000	0.000	0.007	0.003	0.006	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.76E-09	1.06E-06	2.86E-07	1.355997	0.005
648840.48	4185008.02	0.000	0.000	0.000	0.007	0.003	0.005	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.77E-09	9.70E-07	2.63E-07	1.239003	0.005
648860.48	4185008.02	0.000	0.000	0.000	0.006	0.002	0.005	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.79E-09	8.92E-07	2.44E-07	1.141163	0.004
648880.48	4185008.02	0.000	0.000	0.000	0.006	0.002	0.005	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.81E-09	8.26E-07	2.27E-07	1.059106	0.004
648900.48	4185008.02	0.000	0.000	0.000	0.006	0.002	0.005	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.84E-09	7.69E-07	2.13E-07	0.988811	0.004
648920.48	4185008.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.86E-09	7.21E-07	2.01E-07	0.927754	0.003
648940.48	4185008.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.88E-09	6.78E-07	1.91E-07	0.874369	0.003
648960.48	4185008.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.90E-09	6.41E-07	1.81E-07	0.82777	0.003
648980.48	4185008.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.92E-09	6.07E-07	1.73E-07	0.785756	0.003
649000.48	4185008.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.93E-09	5.77E-07	1.65E-07	0.747851	0.003
648680.48	4185028.02	0.000	0.000	0.000	0.017	0.007	0.014	0.050	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.69E-09	2.81E-06	7.26E-07	3.54572	0.013
648700.48	4185028.02	0.000	0.000	0.000	0.014	0.005	0.011	0.041	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.71E-09	2.30E-06	5.92E-07	2.894159	0.011
648720.48	4185028.02	0.000	0.000	0.000	0.012	0.005	0.010	0.034	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.72E-09	1.93E-06	5.01E-07	2.436435	0.009
648740.48	4185028.02	0.000	0.000	0.000	0.011	0.004	0.008	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.74E-09	1.65E-06	4.32E-07	2.087658	0.008
648760.48	4185028.02	0.000	0.000	0.000	0.009	0.004	0.007	0.025	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.75E-09	1.44E-06	3.80E-07	1.82134	0.007
648780.48	4185028.02	0.000	0.000	0.000	0.009	0.003	0.007	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.77E-09	1.27E-06	3.39E-07	1.61481	0.006
648800.48	4185028.02	0.000	0.000	0.000	0.008	0.003	0.006	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.80E-09	1.14E-06	3.07E-07	1.449634	0.005
648820.48	4185028.02	0.000	0.000	0.000	0.007	0.003	0.006	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.82E-09	1.03E-06	2.80E-07	1.314401	0.005
648840.48	4185028.02	0.000	0.000	0.000	0.007	0.003	0.005	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.83E-09	9.38E-07	2.57E-07	1.200841	0.004
648860.48	4185028.02	0.000	0.000	0.000	0.006	0.002	0.005	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.86E-09	8.62E-07	2.39E-07	1.106782	0.004
648880.48	4185028.02	0.000	0.000	0.000	0.006	0.002	0.005	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.88E-09	7.99E-07	2.23E-07	1.027783	0.004
648900.48	4185028.02	0.000	0.000	0.000	0.006	0.002	0.005	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.90E-09	7.45E-07	2.09E-07	0.959993	0.003
648920.48	4185028.02	0.000	0.000	0.000	0.005	0.002	0.004	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.92E-09	6.98E-07	1.97E-07	0.901541	0.003
648940.48	4185028.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.94E-09	6.57E-07	1.87E-07	0.850104	0.003
648960.48	4185028.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.97E-09	6.21E-07	1.78E-07	0.804926	0.003
648980.48	4185028.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.99E-09	5.89E-07	1.69E-07	0.764457	0.003
648680.48	4185048.02	0.000	0.000	0.000	0.017	0.007	0.014	0.049	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.75E-09	2.76E-06	7.17E-07	3.48318	0.013
648700.48	4185048.02	0.000	0.000	0.000	0.014	0.005	0.011	0.039	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.76E-09	2.24E-06	5.83E-07	2.827597	0.011
648720.48	4185048.02	0.000	0.000	0.000	0.012	0.005	0.010	0.033	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.78E-09	1.87E-06	4.91E-07	2.371246	0.009
648740.48	4185048.02	0.000	0.000	0.000	0.011	0.004	0.008	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.80E-09	1.60E-06	4.23E-07	2.02556	0.008
648760.48	4185048.02	0.000	0.000	0.000	0.009	0.004	0.007	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.81E-09	1.38E-06	3.71E-07	1.76066	0.007
648780.48	4185048.02	0.000	0.000	0.000	0.009	0.003	0.007	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.83E-09	1.22E-06	3.31E-07	1.559484	0.006
648800.48	4185048.02	0.000	0.000	0.000	0.008	0.003	0.006	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.86E-09	1.09E-06	2.99E-07	1.399722	0.005
648820.48	4185048.02	0.000	0.000	0.000	0.007	0.003	0.006	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.88E-09	9.90E-07	2.73E-07	1.269271	0.005
648840.48	4185048.02	0.000	0.000	0.000	0.007	0.003	0.005	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.90E-09	9.03E-07	2.52E-07	1.160402	0.004
648860.48	4185048.02	0.000	0.000	0.000	0.006	0.002	0.005	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.92E-09	8.31E-07	2.33E-07	1.070407	0.004
648880.48	4185048.02	0.000	0.000	0.000	0.006	0.002	0.005	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.94E-09	7.71E-07	2.18E-07	0.995142	0.004
648900.48	4185048.02	0.000	0.000	0.000	0.006	0.002	0.005	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.97E-09	7.20E-07	2.05E-07	0.93061	0.003
648920.48	4185048.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.99E-09	6.75E-07	1.93E-07	0.874642	0.003
648940.48	4185048.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.01E-09	6.36E-07	1.83E-07	0.825489	0.003
648960.48	4185048.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.04E-09	6.02E-07	1.74E-07	0.781984	0.003

648980.48	4185048.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.06E-09	5.71E-07	1.66E-07	0.743126	0.003
648680.48	4185068.02	0.000	0.000	0.000	0.017	0.007	0.014	0.047	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.81E-09	2.68E-06	7.03E-07	3.389202	0.013
648700.48	4185068.02	0.000	0.000	0.000	0.014	0.005	0.011	0.037	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.82E-09	2.16E-06	5.69E-07	2.734426	0.010
648720.48	4185068.02	0.000	0.000	0.000	0.012	0.005	0.010	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.84E-09	1.80E-06	4.78E-07	2.281095	0.009
648740.48	4185068.02	0.000	0.000	0.000	0.011	0.004	0.008	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.86E-09	1.53E-06	4.12E-07	1.946459	0.007
648760.48	4185068.02	0.000	0.000	0.000	0.009	0.004	0.007	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.88E-09	1.32E-06	3.61E-07	1.690761	0.006
648780.48	4185068.02	0.000	0.000	0.000	0.009	0.003	0.007	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.90E-09	1.17E-06	3.22E-07	1.496874	0.006
648800.48	4185068.02	0.000	0.000	0.000	0.008	0.003	0.006	0.017	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.92E-09	1.05E-06	2.91E-07	1.344295	0.005
648820.48	4185068.02	0.000	0.000	0.000	0.007	0.003	0.006	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.95E-09	9.48E-07	2.66E-07	1.220468	0.004
648840.48	4185068.02	0.000	0.000	0.000	0.007	0.003	0.005	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.97E-09	8.67E-07	2.46E-07	1.118537	0.004
648860.48	4185068.02	0.000	0.000	0.000	0.006	0.002	0.005	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.99E-09	7.99E-07	2.28E-07	1.033734	0.004
648880.48	4185068.02	0.000	0.000	0.000	0.006	0.002	0.005	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.02E-09	7.43E-07	2.13E-07	0.96203	0.003
648900.48	4185068.02	0.000	0.000	0.000	0.006	0.002	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.04E-09	6.94E-07	2.01E-07	0.900526	0.003
648920.48	4185068.02	0.000	0.000	0.000	0.005	0.002	0.004	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.06E-09	6.52E-07	1.89E-07	0.847161	0.003
648940.48	4185068.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.09E-09	6.15E-07	1.80E-07	0.800355	0.003
648960.48	4185068.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.11E-09	5.82E-07	1.71E-07	0.758802	0.003
648980.48	4185068.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.13E-09	5.53E-07	1.63E-07	0.721728	0.003
648680.48	4185088.02	0.000	0.000	0.000	0.017	0.007	0.014	0.044	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.87E-09	2.57E-06	6.85E-07	3.262385	0.012
648700.48	4185088.02	0.000	0.000	0.000	0.014	0.005	0.011	0.035	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.88E-09	2.06E-06	5.52E-07	2.616732	0.010
648720.48	4185088.02	0.000	0.000	0.000	0.012	0.005	0.010	0.028	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.90E-09	1.70E-06	4.62E-07	2.171111	0.008
648740.48	4185088.02	0.000	0.000	0.000	0.011	0.004	0.008	0.024	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.92E-09	1.45E-06	3.98E-07	1.850701	0.007
648760.48	4185088.02	0.000	0.000	0.000	0.009	0.004	0.007	0.020	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.95E-09	1.26E-06	3.49E-07	1.610868	0.006
648780.48	4185088.02	0.000	0.000	0.000	0.009	0.003	0.007	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.97E-09	1.11E-06	3.12E-07	1.427789	0.005
648800.48	4185088.02	0.000	0.000	0.000	0.008	0.003	0.006	0.015	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.99E-09	9.95E-07	2.83E-07	1.284054	0.005
648820.48	4185088.02	0.000	0.000	0.000	0.007	0.003	0.006	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.02E-09	9.04E-07	2.59E-07	1.168533	0.004
648840.48	4185088.02	0.000	0.000	0.000	0.007	0.003	0.005	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.04E-09	8.28E-07	2.39E-07	1.073311	0.004
648860.48	4185088.02	0.000	0.000	0.000	0.006	0.002	0.005	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.06E-09	7.65E-07	2.23E-07	0.993844	0.004
648880.48	4185088.02	0.000	0.000	0.000	0.006	0.002	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.08E-09	7.12E-07	2.08E-07	0.926572	0.003
648900.48	4185088.02	0.000	0.000	0.000	0.006	0.002	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.11E-09	6.67E-07	1.96E-07	0.868982	0.003
648920.48	4185088.02	0.000	0.000	0.000	0.005	0.002	0.004	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.13E-09	6.28E-07	1.85E-07	0.818897	0.003
648940.48	4185088.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.16E-09	5.93E-07	1.76E-07	0.77484	0.003
648960.48	4185088.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.18E-09	5.62E-07	1.67E-07	0.73541	0.003
648980.48	4185088.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.20E-09	5.35E-07	1.59E-07	0.70017	0.002
648680.48	4185108.02	0.000	0.000	0.000	0.017	0.006	0.014	0.040	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.93E-09	2.41E-06	6.55E-07	3.069154	0.011
648700.48	4185108.02	0.000	0.000	0.000	0.014	0.005	0.011	0.032	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.95E-09	1.92E-06	5.28E-07	2.450861	0.009
648720.48	4185108.02	0.000	0.000	0.000	0.012	0.005	0.009	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.97E-09	1.58E-06	4.42E-07	2.030481	0.008
648740.48	4185108.02	0.000	0.000	0.000	0.010	0.004	0.008	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.99E-09	1.35E-06	3.81E-07	1.734285	0.006
648760.48	4185108.02	0.000	0.000	0.000	0.009	0.004	0.007	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.01E-09	1.17E-06	3.35E-07	1.515077	0.006
648780.48	4185108.02	0.000	0.000	0.000	0.009	0.003	0.007	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.03E-09	1.04E-06	3.01E-07	1.348742	0.005
648800.48	4185108.02	0.000	0.000	0.000	0.008	0.003	0.006	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.06E-09	9.39E-07	2.73E-07	1.218979	0.004
648820.48	4185108.02	0.000	0.000	0.000	0.007	0.003	0.006	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.09E-09	8.57E-07	2.51E-07	1.114385	0.004
648840.48	4185108.02	0.000	0.000	0.000	0.007	0.003	0.005	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.11E-09	7.88E-07	2.32E-07	1.026632	0.004
648860.48	4185108.02	0.000	0.000	0.000	0.006	0.002	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.13E-09	7.31E-07	2.17E-07	0.953607	0.003
648880.48	4185108.02	0.000	0.000	0.000	0.006	0.002	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.16E-09	6.82E-07	2.03E-07	0.891435	0.003
648900.48	4185108.02	0.000	0.000	0.000	0.006	0.002	0.005	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.19E-09	6.40E-07	1.91E-07	0.837729	0.003
648920.48	4185108.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.21E-09	6.04E-07	1.81E-07	0.790885	0.003
648940.48	4185108.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.24E-09	5.71E-07	1.72E-07	0.749343	0.003
648960.48	4185108.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.26E-09	5.43E-07	1.63E-07	0.712229	0.002
648980.48	4185108.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.28E-09	5.17E-07	1.56E-07	0.678833	0.002
648680.48	4185128.02	0.000	0.000	0.000	0.017	0.006	0.013	0.035	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.99E-09	2.18E-06	6.15E-07	2.804376	0.010
648700.48	4185128.02	0.000	0.000	0.000	0.014	0.005	0.011	0.027	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.01E-09	1.74E-06	4.97E-07	2.245093	0.008
648720.48	4185128.02	0.000	0.000	0.000	0.012	0.004	0.009	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.03E-09	1.45E-06	4.18E-07	1.872191	0.007
648740.48	4185128.02	0.000	0.000	0.000	0.010	0.004	0.008	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.06E-09	1.24E-06	3.63E-07	1.611068	0.006
648760.48	4185128.02	0.000	0.000	0.000	0.009	0.004	0.007	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.08E-09	1.09E-06	3.22E-07	1.418568	0.005
648780.48	4185128.02	0.000	0.000	0.000	0.009	0.003	0.007	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.11E-09	9.75E-07	2.90E-07	1.271253	0.005
648800.48	4185128.02	0.000	0.000	0.000	0.008	0.003	0.006	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.13E-09	8.84E-07	2.64E-07	1.15488	0.004
648820.48	4185128.02	0.000	0.000	0.000	0.007	0.003	0.006	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.16E-09	8.10E-07	2.44E-07	1.060208	0.004
648840.48	4185128.02	0.000	0.000	0.000	0.007	0.003	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.19E-09	7.49E-07	2.26E-07	0.980728	0.003
648860.48	4185128.02	0.000	0.000	0.000	0.006	0.002	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.22E-09	6.97E-07	2.11E-07	0.913972	0.003
648880.48	4185128.02	0.000	0.000	0.000	0.006	0.002	0.005	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.24E-09	6.52E-07	1.98E-07	0.856749	0.003
648900.48	4185128.02	0.000	0.000	0.000	0.006	0.002	0.005	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.27E-09	6.14E-07	1.87E-07	0.806964	0.003
648920.48	4185128.02	0.000	0.000	0.000	0.005	0.002	0.004	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.30E-09	5.80E-07	1.77E-07	0.763213	0.003
648940.48	4185128.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.33E-09	5.50E-07	1.68E-07	0.724344	0.003
648960.48	4185128.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.35E-09	5.23E-07	1.60E-07	0.689388	0.002
648980.48	4185128.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.37E-09	4.99E-07	1.52E-07	0.657784	0.002
648680.48	4185148.02	0.000	0.000	0.000	0.017	0.006	0.013	0.029	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.06E-09	1.91E-06	5.69E-07	2.488371	0.009
648700.48	4185148.02	0.000	0.000	0.000	0.014	0.005	0.011	0.023	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.08E-09	1.55E-06	4.65E-07	2.020496	0.007
648720.48	4185148.02	0.000	0.000	0.000	0.012	0.004	0.009	0.019	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.11E-09	1.31E-06	3.95E-07	1.709942	0.006
648740.48	4185148.02	0.000	0.000	0.000	0.010	0.004	0.008	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.13E-09	1.14E-06	3.46E-07	1.488728	0.005
648760.48	4185148.02	0.000	0.000	0.000	0.009	0.004	0.007	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.16E-09	1.01E-06	3.08E-07	1.32323	0.005
648780.48	4185148.02	0.000	0.000	0.000	0.009	0.003	0.007	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.19E-09	9.09E-07	2.79E-07	1.194682	0.004
648800.48	4185148.02	0.000	0.000	0.000	0.008	0.003	0.006	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.22E-09	8.30E-07	2.56E-07	1.091687	0.004
648820.48	4185148.02	0.000	0.000	0.000	0.007	0.003	0.006	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.25E-09	7.65E-07	2.36E-07	1.007072	0.004
648840.48	4185148.02	0.000	0.000	0.000	0.007	0.003	0.005	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.28E-09	7.10E-07	2.20E-07	0.935946	0.003
648860.48	4185148.02	0.000	0.000	0.000	0.006	0.002	0.005	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.31E-09	6.63E-07	2.06E-07	0.875288	0.003
648880.48	4185148.02	0.000	0.000	0.000	0.006	0.002	0.005	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.33E-09	6.23E-07	1.93E-07	0.822762	0.003
648900.48	4185148.02	0.000	0.000	0.000	0.006	0.002	0.005	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.36E-09	5.88E-07	1.83E-07	0.776659	0.003
648920.48	4185148.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.39E-09	5.57E-07	1.73E-07	0.735801	0.003
648940.48	4185148.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.42E-09	5.29E-07	1.64E-07	0.699408	0.002
648960.48	4185148.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.45E-09	5.04E-07	1.56E-07	0.666706	0.002
648980.48	4185148.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.47E-09	4.81E-07	1.49E-07	0.636978	0.002
648680.48	4185168.02	0.000	0.000	0.000	0.017	0.006	0.013	0.022	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.13E-09	1.63E-06	5.20E-07	2.154028	0.008
648700.48	4185168.02	0.000	0.000	0.000	0.014	0.005	0.011	0.018	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.16E-09	1.36E-06	4.33E-07	1.798602	0.006
648720.48	4185168.02	0.000	0.000	0.000	0.012	0.005	0.009	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.19E-09	1.17E-06	3.73E-07	1.552224	0.006
648740.48	4185168.02	0.000	0.000	0.000	0.011	0.004	0.008	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.21E-09	1.03E-06	3.29E-07	1.37046	0.005
648760.48	4185168.02	0.000	0.000	0.000	0.009	0.004	0.007	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.24E-09	9.29E-07	2.96E-07	1.230961	0.004
648780.48	4185168.02	0.000	0.000	0.000	0.009	0.003	0.007	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.27E-09	8.45E-07	2.69E-07	1.12042	0.004
648800.48	4185168.02	0.000	0.000	0.000	0.008	0.003	0.006	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.30E-09	7.77E-07	2.47E-07	1.030454	0.004
648820.48	4185168.02	0.000	0.000	0.000	0.007	0.003	0.006	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.33E-09	7.20E-07	2.29E-07	0.955574	0.003
648840.48	4185168.02	0.000	0.000	0.000	0.007	0.003	0.005	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.36E-09	6.72E-07	2.13E-07	0.891849	0.003
648860.48	4185168.02	0.000	0.000	0.000	0.006	0.002	0.005	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.39E-09	6.30E-07	2.00E-07	0.836951	0.003
648880.48	4185168.02	0.000	0.000	0.000	0.006	0.002	0.005	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.42E-09	5.94E-07	1.88E-07	0.788792	0.003
648900.48	4185168.02	0.000	0.000	0.000	0.006	0.002	0.005	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.45E-09	5.62E-07	1.78E-07	0.746269	0.003
648920.48	4185168.02	0.000	0.000	0.000	0.005	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.48E-09	5.33E-07	1.69E-07	0.708419	0.002
648940.48	4185168.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.52E-09	5.08E-07	1.60E-07	0.674884	0.002
648960.48	4185168.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.55E-09	4.85E-07	1.53E-07	0.644324	0.002
648980.48	4185168.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.57E-09	4.64E-07	1.46E-07	0.61648	0.002
648680.48	4185188.02	0.000	0.000	0.000	0.017	0.006	0.013	0.016	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.21E-09	1.38E-06	4.80E-07	1.863073	0.007
648700.48	4185188.02	0.000	0.000	0.000	0.014	0.005	0.011	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.24E-09	1.19E-06	4.05E-07	1.597451	0.006
648720.48	4185188.02	0.000	0.000	0.000	0.012	0.005	0.009	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.27E-09	1.05E-06	3.53E-07	1.404884	0.005
648740.48	4185188.02	0.000	0.000	0.000	0.011	0.004	0.008	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.29E-09	9.38E-07	3.14E-07	1.258182	0.004

648760.48	4185188.02	0.000	0.000	0.000	0.009	0.004	0.008	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.33E-09	8.53E-07	2.83E-07	1.142874	0.004
648780.48	4185188.02	0.000	0.000	0.000	0.009	0.003	0.007	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.36E-09	7.84E-07	2.59E-07	1.049675	0.004
648800.48	4185188.02	0.000	0.000	0.000	0.008	0.003	0.006	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.39E-09	7.27E-07	2.39E-07	0.972301	0.003
648820.48	4185188.02	0.000	0.000	0.000	0.007	0.003	0.006	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.43E-09	6.78E-07	2.22E-07	0.907005	0.003
648840.48	4185188.02	0.000	0.000	0.000	0.007	0.003	0.005	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.46E-09	6.36E-07	2.07E-07	0.849943	0.003
648860.48	4185188.02	0.000	0.000	0.000	0.006	0.002	0.005	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.49E-09	5.99E-07	1.95E-07	0.800221	0.003
648880.48	4185188.02	0.000	0.000	0.000	0.006	0.002	0.005	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.53E-09	5.66E-07	1.83E-07	0.756384	0.003
648900.48	4185188.02	0.000	0.000	0.000	0.006	0.002	0.005	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.56E-09	5.37E-07	1.73E-07	0.717341	0.002
648920.48	4185188.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.59E-09	5.11E-07	1.64E-07	0.682433	0.002
648940.48	4185188.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.63E-09	4.88E-07	1.56E-07	0.651067	0.002
648960.48	4185188.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.66E-09	4.67E-07	1.49E-07	0.622465	0.002
648980.48	4185188.02	0.000	0.000	0.000	0.005	0.002	0.004	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.68E-09	4.47E-07	1.42E-07	0.596427	0.002
648680.48	4185208.02	0.000	0.000	0.000	0.017	0.006	0.013	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.29E-09	1.20E-06	4.52E-07	1.654055	0.006
648700.48	4185208.02	0.000	0.000	0.000	0.014	0.005	0.011	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.32E-09	1.05E-06	3.84E-07	1.440439	0.005
648720.48	4185208.02	0.000	0.000	0.000	0.012	0.005	0.009	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.35E-09	9.41E-07	3.36E-07	1.283789	0.004
648740.48	4185208.02	0.000	0.000	0.000	0.011	0.004	0.008	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.38E-09	8.57E-07	3.01E-07	1.163637	0.004
648760.48	4185208.02	0.000	0.000	0.000	0.009	0.004	0.008	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.42E-09	7.88E-07	2.73E-07	1.067223	0.004
648780.48	4185208.02	0.000	0.000	0.000	0.009	0.003	0.007	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.45E-09	7.31E-07	2.50E-07	0.98749	0.003
648800.48	4185208.02	0.000	0.000	0.000	0.008	0.003	0.006	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.49E-09	6.82E-07	2.32E-07	0.91987	0.003
648820.48	4185208.02	0.000	0.000	0.000	0.007	0.003	0.006	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.53E-09	6.40E-07	2.16E-07	0.862145	0.003
648840.48	4185208.02	0.000	0.000	0.000	0.007	0.003	0.005	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.57E-09	6.03E-07	2.02E-07	0.811004	0.003
648860.48	4185208.02	0.000	0.000	0.000	0.006	0.002	0.005	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.61E-09	5.70E-07	1.90E-07	0.765843	0.003
648880.48	4185208.02	0.000	0.000	0.000	0.006	0.002	0.005	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.64E-09	5.40E-07	1.79E-07	0.725734	0.002
648900.48	4185208.02	0.000	0.000	0.000	0.006	0.002	0.005	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.68E-09	5.14E-07	1.69E-07	0.689759	0.002
648920.48	4185208.02	0.000	0.000	0.000	0.005	0.002	0.004	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.71E-09	4.90E-07	1.60E-07	0.657342	0.002
648940.48	4185208.02	0.000	0.000	0.000	0.005	0.002	0.004	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.75E-09	4.69E-07	1.52E-07	0.627907	0.002
648960.48	4185208.02	0.000	0.000	0.000	0.005	0.002	0.004	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.78E-09	4.49E-07	1.45E-07	0.601303	0.002
648980.48	4185208.02	0.000	0.000	0.000	0.005	0.002	0.004	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.80E-09	4.31E-07	1.39E-07	0.577113	0.002
648680.48	4185228.02	0.000	0.000	0.000	0.017	0.006	0.013	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.38E-09	1.10E-06	4.39E-07	1.544338	0.005
648700.48	4185228.02	0.000	0.000	0.000	0.014	0.005	0.011	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.41E-09	9.62E-07	3.71E-07	1.339927	0.004
648720.48	4185228.02	0.000	0.000	0.000	0.012	0.005	0.010	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.45E-09	8.66E-07	3.25E-07	1.197642	0.004
648740.48	4185228.02	0.000	0.000	0.000	0.011	0.004	0.008	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.48E-09	7.93E-07	2.91E-07	1.090747	0.004
648760.48	4185228.02	0.000	0.000	0.000	0.010	0.004	0.008	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.52E-09	7.34E-07	2.65E-07	1.005436	0.003
648780.48	4185228.02	0.000	0.000	0.000	0.009	0.003	0.007	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.56E-09	6.85E-07	2.43E-07	0.934553	0.003
648800.48	4185228.02	0.000	0.000	0.000	0.008	0.003	0.006	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.60E-09	6.42E-07	2.25E-07	0.874141	0.003
648820.48	4185228.02	0.000	0.000	0.000	0.007	0.003	0.006	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.65E-09	6.05E-07	2.10E-07	0.821594	0.003
648840.48	4185228.02	0.000	0.000	0.000	0.007	0.003	0.005	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.69E-09	5.72E-07	1.96E-07	0.775097	0.003
648680.48	4185248.02	0.000	0.000	0.000	0.017	0.007	0.014	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.48E-09	1.04E-06	4.34E-07	1.483353	0.005
648700.48	4185248.02	0.000	0.000	0.000	0.014	0.005	0.011	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.52E-09	9.07E-07	3.64E-07	1.277075	0.004
648720.48	4185248.02	0.000	0.000	0.000	0.012	0.005	0.010	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.56E-09	8.14E-07	3.17E-07	1.138005	0.004
648871.39	4185481.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.59E-08	4.03E-07	1.25E-07	0.544342	0.001
648891.39	4185481.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.51E-08	3.84E-07	1.20E-07	0.51911	0.001
648911.39	4185481.28	0.001	0.000	0.000	0.004	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.45E-08	3.69E-07	1.15E-07	0.497565	0.001
648931.39	4185481.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.39E-08	3.54E-07	1.10E-07	0.478364	0.001
648951.39	4185481.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.33E-08	3.40E-07	1.06E-07	0.459496	0.001
648971.39	4185481.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.21E-08	3.22E-07	1.02E-07	0.436458	0.001
648771.39	4185501.28	0.001	0.000	0.000	0.007	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.61E-08	4.70E-07	1.61E-07	0.64703	0.002
648791.39	4185501.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.46E-08	4.37E-07	1.50E-07	0.602119	0.002
648811.39	4185501.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	4.12E-07	1.41E-07	0.567195	0.002
648831.39	4185501.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29E-08	3.90E-07	1.34E-07	0.537221	0.001
648851.39	4185501.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23E-08	3.72E-07	1.27E-07	0.511629	0.001
648871.39	4185501.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.19E-08	3.57E-07	1.21E-07	0.490069	0.001
648891.39	4185501.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.16E-08	3.44E-07	1.16E-07	0.47171	0.001
648911.39	4185501.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.12E-08	3.32E-07	1.11E-07	0.454252	0.001
648931.39	4185501.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.09E-08	3.20E-07	1.07E-07	0.437686	0.001
648951.39	4185501.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.04E-08	3.08E-07	1.03E-07	0.421483	0.001
648971.39	4185501.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.91E-09	2.96E-07	9.98E-08	0.405862	0.001
648711.39	4185521.28	0.001	0.000	0.000	0.008	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.57E-08	5.28E-07	1.93E-07	0.736585	0.002
648731.39	4185521.28	0.001	0.000	0.000	0.007	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.38E-08	4.79E-07	1.77E-07	0.66993	0.002
648751.39	4185521.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.27E-08	4.44E-07	1.64E-07	0.620203	0.002
648771.39	4185521.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.20E-08	4.16E-07	1.53E-07	0.581227	0.002
648791.39	4185521.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.15E-08	3.95E-07	1.44E-07	0.549846	0.002
648811.39	4185521.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.12E-08	3.76E-07	1.36E-07	0.523021	0.001
648831.39	4185521.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.08E-08	3.60E-07	1.29E-07	0.499532	0.001
648851.39	4185521.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.05E-08	3.46E-07	1.23E-07	0.478912	0.001
648871.39	4185521.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.03E-08	3.33E-07	1.17E-07	0.460866	0.001
648891.39	4185521.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.01E-08	3.22E-07	1.13E-07	0.444855	0.001
648911.39	4185521.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.91E-09	3.11E-07	1.08E-07	0.429656	0.001
648931.39	4185521.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.65E-09	3.01E-07	1.04E-07	0.415243	0.001
648951.39	4185521.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.37E-09	2.91E-07	1.01E-07	0.401592	0.001
648971.39	4185521.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.14E-09	2.83E-07	9.75E-08	0.389207	0.001
648651.39	4185541.28	0.001	0.000	0.000	0.010	0.004	0.008	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	1.47E-08	6.14E-07	2.44E-07	0.871844	0.002
648671.39	4185541.28	0.001	0.000	0.000	0.009	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.37E-08	5.53E-07	2.17E-07	0.783501	0.002
648691.39	4185541.28	0.001	0.000	0.000	0.008	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.24E-08	5.03E-07	1.96E-07	0.711565	0.002
648711.39	4185541.28	0.001	0.000	0.000	0.007	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.17E-08	4.64E-07	1.80E-07	0.654917	0.002
648731.39	4185541.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.11E-08	4.32E-07	1.66E-07	0.609587	0.002
648751.39	4185541.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.07E-08	4.07E-07	1.55E-07	0.572321	0.002
648771.39	4185541.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.04E-08	3.85E-07	1.45E-07	0.541297	0.002
648791.39	4185541.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.02E-08	3.68E-07	1.37E-07	0.515425	0.001
648811.39	4185541.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.98E-09	3.53E-07	1.30E-07	0.492864	0.001
648831.39	4185541.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.79E-09	3.39E-07	1.24E-07	0.472899	0.001
648851.39	4185541.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.63E-09	3.27E-07	1.19E-07	0.455202	0.001
648871.39	4185541.28	0.001	0.000	0.000	0.004	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.49E-09	3.16E-07	1.14E-07	0.439409	0.001
648891.39	4185541.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.38E-09	3.06E-07	1.09E-07	0.425201	0.001
648911.39	4185541.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.22E-09	2.97E-07	1.05E-07	0.411739	0.001
648931.39	4185541.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.05E-09	2.88E-07	1.02E-07	0.399106	0.001
648951.39	4185541.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.89E-09	2.80E-07	9.84E-08	0.387362	0.001
648971.39	4185541.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.77E-09	2.73E-07	9.53E-08	0.376727	0.001
648631.39	4185561.28	0.001	0.000	0.000	0.010	0.004	0.008	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.04E-08	5.76E-07	2.45E-07	0.831462	0.002
648651.39	4185561.28	0.001	0.000	0.000	0.009	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.04E-08	5.25E-07	2.18E-07	0.753938	0.002
648671.39	4185561.28	0.001	0.000	0.000	0.008	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.03E-08	4.85E-07	1.97E-07	0.692455	0.002
648691.39	4185561.28	0.001	0.000	0.000	0.007	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.01E-08	4.51E-07	1.81E-07	0.6426	0.002
648711.39	4185561.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.95E-09	4.23E-07	1.68E-07	0.600946	0.002
648731.39	4185561.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.81E-09	4.00E-07	1.56E-07	0.566059	0.002
648751.39	4185561.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.66E-09	3.80E-07	1.47E-07	0.536117	0.002
648771.39	4185561.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.50E-09	3.62E-07	1.39E-07	0.510259	0.001
648791.39	4185561.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.38E-09	3.47E-07	1.31E-07	0.488025	0.001
648811.39	4185561.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.30E-09	3.34E-07	1.25E-07	0.468778	0.001
648831.39	4185561.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.19E-09	3.23E-07	1.20E-07	0.451435	0.001
648851.39	4185561.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.10E-09	3.12E-07	1.15E-07	0.435883	0.001
648871.39	4185561.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.02E-09	3.03E-07	1.10E-07	0.421948	0.001

648891.39	4185561.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.94E-09	2.94E-07	1.06E-07	0.409195	0.001
648911.39	4185561.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.83E-09	2.86E-07	1.03E-07	0.397177	0.001
648931.39	4185561.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.72E-09	2.78E-07	9.91E-08	0.385999	0.001
648951.39	4185561.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.62E-09	2.71E-07	9.60E-08	0.375617	0.001
648971.39	4185561.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.56E-09	2.64E-07	9.31E-08	0.366196	0.001
648631.39	4185581.28	0.001	0.000	0.000	0.009	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.26E-09	5.13E-07	2.18E-07	0.739517	0.002
648651.39	4185581.28	0.001	0.000	0.000	0.008	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.24E-09	4.74E-07	1.98E-07	0.680883	0.002
648671.39	4185581.28	0.001	0.000	0.000	0.007	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.23E-09	4.42E-07	1.81E-07	0.632811	0.002
648691.39	4185581.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.18E-09	4.16E-07	1.68E-07	0.593352	0.002
648711.39	4185581.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.11E-09	3.94E-07	1.57E-07	0.559559	0.002
648731.39	4185581.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.08E-09	3.74E-07	1.47E-07	0.530987	0.002
648751.39	4185581.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.04E-09	3.58E-07	1.39E-07	0.506148	0.001
648771.39	4185581.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.99E-09	3.43E-07	1.32E-07	0.484412	0.001
648791.39	4185581.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.94E-09	3.30E-07	1.26E-07	0.4653	0.001
648811.39	4185581.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.89E-09	3.19E-07	1.20E-07	0.448343	0.001
648831.39	4185581.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.82E-09	3.09E-07	1.15E-07	0.433083	0.001
648851.39	4185581.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.77E-09	3.00E-07	1.11E-07	0.419342	0.001
648871.39	4185581.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.72E-09	2.91E-07	1.07E-07	0.406878	0.001
648891.39	4185581.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.67E-09	2.84E-07	1.03E-07	0.395421	0.001
648911.39	4185581.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.59E-09	2.76E-07	9.98E-08	0.384632	0.001
648931.39	4185581.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.53E-09	2.69E-07	9.66E-08	0.37461	0.001
648951.39	4185581.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.48E-09	2.63E-07	9.37E-08	0.365316	0.001
648611.39	4185601.28	0.001	0.000	0.000	0.009	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.71E-09	5.01E-07	2.15E-07	0.725289	0.002
648631.39	4185601.28	0.001	0.000	0.000	0.008	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.74E-09	4.66E-07	1.96E-07	0.670556	0.002
648651.39	4185601.28	0.001	0.000	0.000	0.007	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.74E-09	4.36E-07	1.81E-07	0.624858	0.002
648671.39	4185601.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.74E-09	4.10E-07	1.68E-07	0.586478	0.002
648691.39	4185601.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.73E-09	3.89E-07	1.57E-07	0.553988	0.002
648711.39	4185601.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.69E-09	3.70E-07	1.48E-07	0.526232	0.002
648731.39	4185601.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.68E-09	3.54E-07	1.40E-07	0.502	0.001
648751.39	4185601.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.66E-09	3.40E-07	1.32E-07	0.480699	0.001
648771.39	4185601.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.65E-09	3.27E-07	1.26E-07	0.461988	0.001
648791.39	4185601.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.64E-09	3.16E-07	1.21E-07	0.445417	0.001
648811.39	4185601.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.62E-09	3.06E-07	1.16E-07	0.430513	0.001
648831.39	4185601.28	0.001	0.000	0.000	0.004	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.59E-09	2.97E-07	1.11E-07	0.417015	0.001
648851.39	4185601.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.56E-09	2.89E-07	1.07E-07	0.404713	0.001
648871.39	4185601.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.53E-09	2.81E-07	1.04E-07	0.3935	0.001
648891.39	4185601.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.51E-09	2.74E-07	1.00E-07	0.383171	0.001
648911.39	4185601.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.46E-09	2.68E-07	9.71E-08	0.373414	0.001
648931.39	4185601.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.42E-09	2.62E-07	9.42E-08	0.364334	0.001
648951.39	4185601.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.39E-09	2.56E-07	9.15E-08	0.355906	0.001
648591.39	4185621.28	0.001	0.000	0.000	0.009	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.41E-09	4.89E-07	2.11E-07	0.708409	0.002
648611.39	4185621.28	0.001	0.000	0.000	0.008	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.46E-09	4.57E-07	1.94E-07	0.659013	0.002
648631.39	4185621.28	0.001	0.000	0.000	0.007	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.48E-09	4.29E-07	1.79E-07	0.616205	0.002
648651.39	4185621.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.49E-09	4.04E-07	1.66E-07	0.579317	0.002
648671.39	4185621.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.49E-09	3.84E-07	1.56E-07	0.548129	0.002
648691.39	4185621.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.49E-09	3.66E-07	1.47E-07	0.521552	0.002
648711.39	4185621.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.47E-09	3.50E-07	1.39E-07	0.498212	0.001
648731.39	4185621.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.46E-09	3.36E-07	1.32E-07	0.477424	0.001
648751.39	4185621.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.45E-09	3.24E-07	1.26E-07	0.458935	0.001
648771.39	4185621.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.46E-09	3.13E-07	1.21E-07	0.442594	0.001
648791.39	4185621.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.46E-09	3.03E-07	1.16E-07	0.427919	0.001
648811.39	4185621.28	0.001	0.000	0.000	0.004	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.46E-09	2.95E-07	1.12E-07	0.414672	0.001
648831.39	4185621.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.44E-09	2.86E-07	1.08E-07	0.40259	0.001
648851.39	4185621.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.43E-09	2.79E-07	1.04E-07	0.391511	0.001
648871.39	4185621.28	0.001	0.000	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.42E-09	2.72E-07	1.01E-07	0.381429	0.001
648891.39	4185621.28	0.001	0.000	0.000	0.004	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.41E-09	2.66E-07	9.75E-08	0.372068	0.001
648911.39	4185621.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.38E-09	2.60E-07	9.46E-08	0.363197	0.001
648931.39	4185621.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.37E-09	2.55E-07	9.19E-08	0.354909	0.001
648951.39	4185621.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.50E-07	8.93E-08	0.347203	0.001
648571.39	4185641.28	0.001	0.000	0.000	0.009	0.003	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.22E-09	4.73E-07	2.04E-07	0.685946	0.002
648591.39	4185641.28	0.001	0.000	0.000	0.008	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.28E-09	4.46E-07	1.90E-07	0.6446	0.002
648611.39	4185641.28	0.001	0.000	0.000	0.007	0.003	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.32E-09	4.21E-07	1.77E-07	0.606493	0.002
648631.39	4185641.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	3.99E-07	1.65E-07	0.572163	0.002
648651.39	4185641.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	3.79E-07	1.55E-07	0.54266	0.002
648671.39	4185641.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	3.62E-07	1.46E-07	0.516715	0.002
648691.39	4185641.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	3.47E-07	1.39E-07	0.494017	0.001
648711.39	4185641.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	3.34E-07	1.32E-07	0.473892	0.001
648731.39	4185641.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	3.22E-07	1.26E-07	0.455994	0.001
648751.39	4185641.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	3.11E-07	1.21E-07	0.439933	0.001
648771.39	4185641.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	3.01E-07	1.16E-07	0.425469	0.001
648791.39	4185641.28	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.92E-07	1.12E-07	0.412401	0.001
648811.39	4185641.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.84E-07	1.08E-07	0.400519	0.001
648831.39	4185641.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.77E-07	1.04E-07	0.389594	0.001
648851.39	4185641.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.70E-07	1.01E-07	0.379613	0.001
648871.39	4185641.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.64E-07	9.77E-08	0.370432	0.001
648891.39	4185641.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.59E-07	9.48E-08	0.361921	0.001
648911.39	4185641.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	2.53E-07	9.21E-08	0.353797	0.001
648931.39	4185641.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.48E-07	8.96E-08	0.346172	0.001
648951.39	4185641.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	2.44E-07	8.72E-08	0.33911	0.001
648611.39	4185661.28	0.001	0.000	0.000	0.007	0.003	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.25E-09	3.93E-07	1.63E-07	0.56396	0.002
648631.39	4185661.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-09	3.74E-07	1.53E-07	0.536073	0.002
648651.39	4185661.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-09	3.58E-07	1.45E-07	0.51142	0.002
648671.39	4185661.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-09	3.43E-07	1.38E-07	0.489481	0.001
648691.39	4185661.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.27E-09	3.30E-07	1.31E-07	0.47007	0.001
648711.39	4185661.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-09	3.19E-07	1.26E-07	0.452775	0.001
648731.39	4185661.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-09	3.08E-07	1.20E-07	0.437224	0.001
648751.39	4185661.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.30E-09	2.99E-07	1.16E-07	0.423094	0.001
648771.39	4185661.28	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.31E-09	2.90E-07	1.12E-07	0.410254	0.001
648791.39	4185661.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.31E-09	2.83E-07	1.08E-07	0.398538	0.001
648811.39	4185661.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.31E-09	2.75E-07	1.04E-07	0.38784	0.001
648831.39	4185661.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.32E-09	2.69E-07	1.01E-07	0.377939	0.001
648851.39	4185661.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.32E-09	2.63E-07	9.78E-08	0.368867	0.001
648871.39	4185661.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.57E-07	9.50E-08	0.360508	0.001
648891.39	4185661.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.52E-07	9.24E-08	0.352643	0.001
648911.39	4185661.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.47E-07	8.98E-08	0.345177	0.001
648931.39	4185661.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	2.42E-07	8.75E-08	0.338172	0.001
648951.39	4185661.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.38E-07	8.52E-08	0.33166	0.001
648611.39	4185681.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.21E-09	3.69E-07	1.52E-07	0.528966	0.002
648631.39	4185681.28	0.001	0.000	0.000	0.006	0.002	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.23E-09	3.54E-07	1.44E-07	0.505913	0.002
648651.39	4185681.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.23E-09	3.40E-07	1.37E-07	0.48509	0.001
648671.39	4185681.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.23E-09	3.27E-07	1.31E-07	0.466252	0.001

648691.39	4185681.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.24E-09	3.16E-07	1.25E-07	0.449509	0.001
648711.39	4185681.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-09	3.06E-07	1.20E-07	0.434471	0.001
648731.39	4185681.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.27E-09	2.97E-07	1.15E-07	0.420717	0.001
648751.39	4185681.28	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.28E-09	2.89E-07	1.11E-07	0.408252	0.001
648771.39	4185681.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-09	2.81E-07	1.08E-07	0.396735	0.001
648791.39	4185681.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-09	2.74E-07	1.04E-07	0.386315	0.001
648811.39	4185681.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.30E-09	2.67E-07	1.01E-07	0.376566	0.001
648831.39	4185681.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.31E-09	2.61E-07	9.79E-08	0.367582	0.001
648851.39	4185681.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.33E-09	2.56E-07	9.51E-08	0.359276	0.001
648871.39	4185681.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.51E-07	9.25E-08	0.351539	0.001
648891.39	4185681.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	2.46E-07	9.00E-08	0.344214	0.001
648911.39	4185681.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.41E-07	8.77E-08	0.337353	0.001
648931.39	4185681.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.38E-09	2.37E-07	8.55E-08	0.330887	0.001
648951.39	4185681.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.39E-09	2.33E-07	8.34E-08	0.324883	0.001
648631.39	4185701.28	0.001	0.000	0.000	0.006	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.22E-09	3.37E-07	1.36E-07	0.48064	0.001
648651.39	4185701.28	0.001	0.000	0.000	0.005	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.23E-09	3.25E-07	1.30E-07	0.462803	0.001
648671.39	4185701.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.23E-09	3.14E-07	1.24E-07	0.446541	0.001
648691.39	4185701.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.24E-09	3.04E-07	1.19E-07	0.431835	0.001
648711.39	4185701.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-09	2.95E-07	1.15E-07	0.41857	0.001
648731.39	4185701.28	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.28E-09	2.87E-07	1.11E-07	0.406448	0.001
648751.39	4185701.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-09	2.80E-07	1.07E-07	0.395227	0.001
648771.39	4185701.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-09	2.73E-07	1.04E-07	0.385027	0.001
648791.39	4185701.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.30E-09	2.66E-07	1.01E-07	0.375477	0.001
648811.39	4185701.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.32E-09	2.60E-07	9.80E-08	0.366632	0.001
648831.39	4185701.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.55E-07	9.53E-08	0.358401	0.001
648851.39	4185701.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.50E-07	9.27E-08	0.350695	0.001
648871.39	4185701.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.37E-09	2.45E-07	9.02E-08	0.343479	0.001
648891.39	4185701.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.38E-09	2.40E-07	8.79E-08	0.336672	0.001
648911.39	4185701.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.40E-09	2.36E-07	8.57E-08	0.3303	0.001
648931.39	4185701.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.42E-09	2.32E-07	8.36E-08	0.324348	0.001
648631.39	4185721.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.24E-09	3.22E-07	1.29E-07	0.459231	0.001
648651.39	4185721.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.25E-09	3.12E-07	1.24E-07	0.44388	0.001
648671.39	4185721.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-09	3.02E-07	1.19E-07	0.429692	0.001
648691.39	4185721.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.26E-09	2.94E-07	1.15E-07	0.416653	0.001
648711.39	4185721.28	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.28E-09	2.86E-07	1.11E-07	0.404814	0.001
648731.39	4185721.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.29E-09	2.78E-07	1.07E-07	0.393972	0.001
648751.39	4185721.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.31E-09	2.72E-07	1.04E-07	0.383929	0.001
648771.39	4185721.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.32E-09	2.65E-07	1.01E-07	0.374619	0.001
648791.39	4185721.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.60E-07	9.81E-08	0.365905	0.001
648811.39	4185721.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	2.54E-07	9.54E-08	0.357793	0.001
648831.39	4185721.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.38E-09	2.49E-07	9.28E-08	0.350165	0.001
648851.39	4185721.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.40E-09	2.44E-07	9.04E-08	0.343018	0.001
648871.39	4185721.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.41E-09	2.40E-07	8.81E-08	0.336266	0.001
648891.39	4185721.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.43E-09	2.36E-07	8.60E-08	0.329934	0.001
648911.39	4185721.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.45E-09	2.32E-07	8.39E-08	0.324	0.001
648931.39	4185721.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.48E-09	2.28E-07	8.20E-08	0.31845	0.001
648631.39	4185741.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.27E-09	3.10E-07	1.23E-07	0.440971	0.001
648651.39	4185741.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.28E-09	3.01E-07	1.19E-07	0.4275	0.001
648671.39	4185741.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.30E-09	2.92E-07	1.14E-07	0.415031	0.001
648691.39	4185741.28	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.30E-09	2.85E-07	1.11E-07	0.403477	0.001
648711.39	4185741.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.31E-09	2.77E-07	1.07E-07	0.392769	0.001
648731.39	4185741.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.33E-09	2.71E-07	1.04E-07	0.382973	0.001
648751.39	4185741.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.35E-09	2.65E-07	1.01E-07	0.373871	0.001
648771.39	4185741.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.37E-09	2.59E-07	9.81E-08	0.365354	0.001
648791.39	4185741.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.39E-09	2.54E-07	9.55E-08	0.357368	0.001
648811.39	4185741.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.41E-09	2.48E-07	9.30E-08	0.349826	0.001
648831.39	4185741.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.43E-09	2.44E-07	9.06E-08	0.342751	0.001
648851.39	4185741.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.45E-09	2.39E-07	8.83E-08	0.336056	0.001
648871.39	4185741.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.47E-09	2.35E-07	8.62E-08	0.329747	0.001
648891.39	4185741.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.49E-09	2.31E-07	8.42E-08	0.323806	0.001
648911.39	4185741.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.52E-09	2.28E-07	8.22E-08	0.318268	0.001
648651.39	4185761.28	0.001	0.000	0.000	0.005	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.33E-09	2.91E-07	1.14E-07	0.413223	0.001
648671.39	4185761.28	0.001	0.000	0.000	0.004	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.34E-09	2.84E-07	1.10E-07	0.402188	0.001
648691.39	4185761.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.36E-09	2.77E-07	1.07E-07	0.391833	0.001
648711.39	4185761.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.37E-09	2.70E-07	1.04E-07	0.382212	0.001
648731.39	4185761.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.38E-09	2.64E-07	1.01E-07	0.373253	0.001
648751.39	4185761.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.40E-09	2.58E-07	9.81E-08	0.364877	0.001
648771.39	4185761.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.42E-09	2.53E-07	9.55E-08	0.357033	0.001
648791.39	4185761.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.45E-09	2.48E-07	9.31E-08	0.349608	0.001
648811.39	4185761.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.47E-09	2.43E-07	9.07E-08	0.342576	0.001
648831.39	4185761.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.49E-09	2.39E-07	8.86E-08	0.336022	0.001
648851.39	4185761.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.51E-09	2.35E-07	8.64E-08	0.329752	0.001
648871.39	4185761.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.54E-09	2.31E-07	8.44E-08	0.323835	0.001
648891.39	4185761.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.57E-09	2.27E-07	8.25E-08	0.318251	0.001
648691.39	4185781.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.42E-09	2.69E-07	1.04E-07	0.381526	0.001
648711.39	4185781.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.43E-09	2.64E-07	1.01E-07	0.372786	0.001
648731.39	4185781.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.44E-09	2.58E-07	9.81E-08	0.36458	0.001
648751.39	4185781.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.46E-09	2.53E-07	9.56E-08	0.356846	0.001
648771.39	4185781.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.49E-09	2.48E-07	9.32E-08	0.349533	0.001
648791.39	4185781.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.51E-09	2.43E-07	9.09E-08	0.342563	0.001
648811.39	4185781.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.54E-09	2.39E-07	8.87E-08	0.336061	0.001
648831.39	4185781.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.56E-09	2.35E-07	8.66E-08	0.329869	0.001
648851.39	4185781.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.59E-09	2.31E-07	8.47E-08	0.323997	0.001
648871.39	4185781.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.62E-09	2.27E-07	8.28E-08	0.318424	0.001
648891.39	4185781.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.65E-09	2.24E-07	8.09E-08	0.313111	0.001
648691.39	4185801.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.49E-09	2.63E-07	1.01E-07	0.372356	0.001
648711.39	4185801.28	0.001	0.000	0.000	0.004	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.50E-09	2.58E-07	9.81E-08	0.36435	0.001
648731.39	4185801.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.52E-09	2.53E-07	9.56E-08	0.356759	0.001
648751.39	4185801.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.54E-09	2.48E-07	9.33E-08	0.349569	0.001
648771.39	4185801.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.57E-09	2.43E-07	9.10E-08	0.342639	0.001
648791.39	4185801.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.59E-09	2.39E-07	8.89E-08	0.336234	0.001
648811.39	4185801.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.61E-09	2.35E-07	8.69E-08	0.330076	0.001
648831.39	4185801.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.64E-09	2.31E-07	8.49E-08	0.324257	0.001
648851.39	4185801.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.67E-09	2.27E-07	8.30E-08	0.318692	0.001
648711.39	4185821.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.58E-09	2.52E-07	9.57E-08	0.356734	0.001
648731.39	4185821.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.60E-09	2.48E-07	9.34E-08	0.349686	0.001
648751.39	4185821.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.62E-09	2.43E-07	9.12E-08	0.342887	0.001
648771.39	4185821.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.64E-09	2.39E-07	8.91E-08	0.33649	0.001
648791.39	4185821.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.66E-09	2.35E-07	8.70E-08	0.330387	0.001
648811.39	4185821.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.69E-09	2.31E-07	8.51E-08	0.324583	0.001
648831.39	4185821.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.72E-09	2.27E-07	8.33E-08	0.319064	0.001

648711.39	4185841.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.66E-09	2.48E-07	9.35E-08	0.349833	0.001
648731.39	4185841.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.68E-09	2.43E-07	9.13E-08	0.343213	0.001
648751.39	4185841.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.70E-09	2.39E-07	8.92E-08	0.336877	0.001
648771.39	4185841.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.72E-09	2.35E-07	8.72E-08	0.330785	0.001
648791.39	4185841.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.75E-09	2.31E-07	8.53E-08	0.324986	0.001
648811.39	4185841.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.78E-09	2.27E-07	8.35E-08	0.319492	0.001
648711.39	4185861.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.75E-09	2.43E-07	9.15E-08	0.343652	0.001
648731.39	4185861.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.77E-09	2.39E-07	8.94E-08	0.337366	0.001
648751.39	4185861.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.79E-09	2.35E-07	8.74E-08	0.331332	0.001
648771.39	4185861.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.82E-09	2.31E-07	8.55E-08	0.32555	0.001
648791.39	4185861.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.85E-09	2.28E-07	8.37E-08	0.320035	0.001
648711.39	4185881.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.85E-09	2.40E-07	8.97E-08	0.338312	0.001
648731.39	4185881.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.87E-09	2.36E-07	8.77E-08	0.332209	0.001
648751.39	4185881.28	0.001	0.000	0.000	0.003	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.89E-09	2.32E-07	8.58E-08	0.326398	0.001
648731.39	4185901.28	0.001	0.000	0.000	0.004	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.97E-09	2.33E-07	8.62E-08	0.327779	0.001

Mossdale Tract Construction HRA - Part 3

Cancer Risk and Hazard Index - Offsite Residential - Uncontrolled

						Exposure Duration (Days)				DPM	
					Start Date	3/2/2026	6/1/2026	6/1/2028			
					Stop Date	5/31/2026	5/31/2028			Emisions (tons)	Emission Rate (g/s)
Source		Year	Start Date	End Date	Calendar Days	3rd Trimester	0<2	2<9	Exposure Duration	Uncontrolled	Uncontrolled
ID 8e	ARLN22	2030	7/1/2030	8/30/2030	60	0	0	60	60	0.02	0.005
ID 11	ARLN19	2030	9/2/2030	10/6/2030	34	0	0	34	34	0.01	0.004
ID 12	ARLN20	2027	1/12/2027	5/15/2027	123	0	123	0	123	0.05	0.006
ID 15	ARLN21	2027	6/7/2027	12/31/2027	207	0	207	0	207	0.04	0.003
ID 15	ARLN21	2028	1/1/2028	6/23/2028	174	0	151	23	174	0.06	0.006
ID 13	PAREA1	2026	3/2/2026	12/13/2026	286	90	195	1	286	0.15	0.009
ID 14 & 16	PAREA2	2026	3/2/2026	12/1/2026	274	90	183	1	274	0.16	0.010
AR15	ARLN6	2030	9/7/2030	10/8/2030	31	0	0	31	31	0.00	0.000
AR15	ARLN6	2027	1/18/2027	5/15/2027	117	0	117	0	117	0.00	0.000
AR17	ARLN7	2027	6/13/2027	12/31/2027	201	0	201	0	201	0.00	0.000
AR17	ARLN7	2028	1/1/2028	6/23/2028	174	0	151	23	174	0.00	0.000
AR18	ARLN8	2027	6/13/2027	12/31/2027	201	0	201	0	201	0.00	0.000
AR18	ARLN8	2028	1/1/2028	6/23/2028	174	0	151	23	174	0.00	0.000
AR19	ARLN9	2027	6/13/2027	12/31/2027	201	0	201	0	201	0.00	0.000
AR19	ARLN9	2028	1/1/2028	6/23/2028	174	0	151	23	174	0.00	0.000
										0.17	

Cancer Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	2<9	
Daily Breathing Rate	DBR	L/kg-day	361	1090	631	
Fraction Of Time At Home	FAH	unitless	1	1	1	Conservatively assume risk at nearby schools >1
Exposure Frequency	EF	days/year	0.96	0.96	0.96	
Age Sensitivity Factor	ASF	unitless	10	10	3	
Inhalation Absorption Factor	A	unitless	1	1	1	
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001	
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001	
Cancer Potency Factor (diesel exhaust)	CPF	$mg/kg\text{-}day^{-1}$	1.1	1.1	1.1	
Averaging Time (for residential exposure)	AT	years	70.00	70.00	70.00	

SOURCE: Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments* . February 2015

Daily breathing rate for residential receptor is based on the OEHHA 95th percentile moderate intensity breathing rates (OEHHA Table 5.7).

Fraction of time at home is set to values per OEHHA Table 8.4 for residential since the nearest school has an unmitigated cancer risk of <1 per million.

Inhalation cancer potency factor from OEHHA Table 7.1

Hazard Index

Chronic Inhalation	REL	$\mu g/m^3$	5

Intake Factor for Inhalation, IF ($m^3/kg\text{-}day$) = DBR*FAH*EF*ED*ASF*A*CF/AT

Source	3rd Trimester	0<2	2<9
ID 8e	0.000	0.000	0.004
ID 11	0.000	0.000	0.002
ID 12	0.000	0.050	0.000
ID 15	0.000	0.085	0.000
ID 15	0.000	0.062	0.002
ID 13	0.012	0.080	0.000
ID 14 & 16	0.012	0.075	0.000
AR15	0.000	0.000	0.002
AR15	0.000	0.048	0.000
AR17	0.000	0.082	0.000
AR17	0.000	0.062	0.002
AR18	0.000	0.082	0.000
AR18	0.000	0.062	0.002
AR19	0.000	0.082	0.000
AR19	0.000	0.062	0.002

Risk Calculation Part 1, R1 = IF*CPF*CF

3rd Trimester	0<2	2<9
0.00E+00	0.00E+00	4.69E-06
0.00E+00	0.00E+00	2.66E-06
0.00E+00	5.53E-05	0.00E+00
0.00E+00	9.31E-05	0.00E+00
0.00E+00	6.79E-05	1.80E-06
1.34E-05	8.77E-05	7.81E-08
1.34E-05	8.23E-05	7.81E-08
0.00E+00	0.00E+00	2.42E-06
0.00E+00	5.26E-05	0.00E+00
0.00E+00	9.04E-05	0.00E+00
0.00E+00	6.79E-05	1.80E-06
0.00E+00	9.04E-05	0.00E+00
0.00E+00	6.79E-05	1.80E-06
0.00E+00	9.04E-05	0.00E+00
0.00E+00	6.79E-05	1.80E-06

	Cancer Risk	UTM X	UTM Y
MAX UNCONTROLLED	13.99	655030.5	4180975.57

HI	UTM X	UTM Y
0.09	650668.6	4182003.03

Diesel Particulate Matter concentration, C_{DPM} ($\mu g/m^3$)

		Project Construction														
X (UTM)	Y (UTM)	ID 8e	ID 11	ID 12	ID 15	ID 15	ID 13	ID 14 & 16	AR15	AR15	AR17	AR17	AR18	AR18	AR19	AR19
		2030	2030	2027	2027	2028	2026	2026	2030	2027	2027	2028	2027	2028	2027	2028
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
648265.45	4186431.83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
648225.45	4186711.83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655197.91	4180791.63	0.001	0.000	0.001	0.013	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655217.91	4180791.63	0.001	0.000	0.001	0.013	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655237.91	4180791.63	0.001	0.000	0.001	0.014	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655257.91	4180791.63	0.000	0.000	0.001	0.014	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655277.91	4180791.63	0.000	0.000	0.001	0.014	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655297.91	4180791.63	0.000	0.000	0.001	0.015	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655317.91	4180791.63	0.000	0.000	0.001	0.015	0.024	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655337.91	4180791.63	0.000	0.000	0.001	0.015	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655357.91	4180791.63	0.000	0.000	0.001	0.016	0.026	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655377.91	4180791.63	0.000	0.000	0.001	0.017	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655397.91	4180791.63	0.000	0.000	0.001	0.018	0.029	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655417.91	4180791.63	0.000	0.000	0.001	0.020	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655437.91	4180791.63	0.000	0.000	0.001	0.024	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655457.91	4180791.63	0.000	0.000	0.001	0.033	0.052	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655197.91	4180811.63	0.001	0.000	0.001	0.015	0.024	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655217.91	4180811.63	0.001	0.000	0.001	0.015	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655237.91	4180811.63	0.001	0.000	0.001	0.016	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655257.91	4180811.63	0.000	0.000	0.001	0.016	0.026	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655277.91	4180811.63	0.000	0.000	0.001	0.016	0.026	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655297.91	4180811.63	0.000	0.000	0.001	0.017	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655317.91	4180811.63	0.000	0.000	0.001	0.017	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655337.91	4180811.63	0.000	0.000	0.001	0.017	0.028	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655357.91	4180811.63	0.000	0.000	0.001	0.018	0.029	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655377.91	4180811.63	0.000	0.000	0.001	0.019	0.030	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655397.91	4180811.63	0.000	0.000	0.001	0.020	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655417.91	4180811.63	0.000	0.000	0.001	0.022	0.036	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655437.91	4180811.63	0.000	0.000	0.001	0.026	0.042	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
655457.91	4180811.63	0.000	0.000	0.001	0.035	0.056	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Risk Calculation Part 2

Cancer Risk = $\sum R1*C_{DPM}$				HI
3rd Trimester	0<2	2<9	Total	C_{DPM}/REL
				unitless
9.26E-09	9.56E-08	1.87E-09	0.106752	0.000
8.46E-09	8.84E-08	1.71E-09	0.098535	0.000
2.62E-08	2.80E-06	4.05E-08	2.871423	0.004
2.60E-08	2.90E-06	4.19E-08	2.970256	0.004
2.58E-08	2.99E-06	4.30E-08	3.054187	0.004
2.56E-08	3.06E-06	4.40E-08	3.125004	0.005
2.54E-08	3.12E-06	4.49E-08	3.187558	0.005
2.52E-08	3.18E-06	4.58E-08	3.249198	0.005
2.51E-08	3.25E-06	4.68E-08	3.317789	0.005
2.49E-08	3.33E-06	4.80E-08	3.402507	0.005
2.47E-08	3.44E-06	4.96E-08	3.515663	0.005
2.45E-08	3.60E-06	5.18E-08	3.67599	0.005
2.44E-08	3.84E-06	5.52E-08	3.916944	0.006
2.42E-08	4.23E-06	6.08E-08	4.316015	0.006
2.40E-08	4.98E-06	7.16E-08	5.078711	0.008
2.39E-08	6.82E-06	9.78E-08	6.93944	0.011
2.61E-08	3.26E-06	4.70E-08	3.332476	0.005
2.59E-08	3.36E-06	4.84E-08	3.431856	0.005
2.58E-08	3.43E-06	4.94E-08	3.506955	0.005
2.56E-08	3.49E-06	5.03E-08	3.56525	0.005
2.54E-08	3.54E-06	5.10E-08	3.615509	0.005
2.52E-08	3.59E-06	5.17E-08	3.667139	0.005
2.50E-08	3.65E-06	5.26E-08	3.728823	0.005
2.49E-08	3.73E-06	5.37E-08	3.810443	0.006
2.47E-08	3.85E-06	5.53E-08	3.926426	0.006
2.45E-08	4.01E-06	5.77E-08	4.095912	0.006
2.43E-08	4.27E-06	6.14E-08	4.359072	0.006
2.42E-08	4.71E-06	6.76E-08	4.796908	0.007
2.40E-08	5.51E-06	7.91E-08	5.613611	0.008
2.38E-08	7.26E-06	1.04E-07	7.390574	0.011

655197.91	4180831.63	0.001	0.000	0.001	0.018	0.029	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.61E-08	3.88E-06	5.59E-08	3.963387	0.006
655217.91	4180831.63	0.001	0.000	0.001	0.018	0.030	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.59E-08	3.96E-06	5.70E-08	4.046849	0.006
655237.91	4180831.63	0.001	0.000	0.001	0.019	0.030	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.57E-08	4.02E-06	5.78E-08	4.101249	0.006
655257.91	4180831.63	0.000	0.000	0.001	0.019	0.030	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	4.06E-06	5.84E-08	4.140971	0.006
655277.91	4180831.63	0.000	0.000	0.001	0.019	0.031	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.54E-08	4.09E-06	5.89E-08	4.176568	0.006
655297.91	4180831.63	0.000	0.000	0.001	0.019	0.031	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-08	4.13E-06	5.95E-08	4.217831	0.006
655317.91	4180831.63	0.000	0.000	0.001	0.020	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	4.19E-06	6.02E-08	4.272405	0.006
655337.91	4180831.63	0.000	0.000	0.001	0.020	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-08	4.26E-06	6.13E-08	4.350755	0.006
655357.91	4180831.63	0.000	0.000	0.001	0.021	0.033	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-08	4.38E-06	6.29E-08	4.462827	0.007
655377.91	4180831.63	0.000	0.000	0.001	0.021	0.034	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.45E-08	4.54E-06	6.52E-08	4.628345	0.007
655397.91	4180831.63	0.000	0.000	0.001	0.023	0.036	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.43E-08	4.79E-06	6.89E-08	4.886674	0.007
655417.91	4180831.63	0.000	0.000	0.001	0.025	0.040	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-08	5.22E-06	7.49E-08	5.31561	0.008
655437.91	4180831.63	0.000	0.000	0.001	0.028	0.046	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.40E-08	5.98E-06	8.58E-08	6.085642	0.009
655457.91	4180831.63	0.000	0.000	0.001	0.036	0.057	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.38E-08	7.44E-06	1.07E-07	7.567214	0.012
655197.91	4180851.63	0.001	0.000	0.001	0.022	0.036	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.61E-08	4.78E-06	6.87E-08	4.87463	0.007
655217.91	4180851.63	0.001	0.000	0.001	0.023	0.037	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.59E-08	4.83E-06	6.94E-08	4.925082	0.007
655237.91	4180851.63	0.001	0.000	0.001	0.023	0.037	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.57E-08	4.86E-06	6.98E-08	4.950472	0.007
655257.91	4180851.63	0.000	0.000	0.001	0.023	0.037	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	4.87E-06	7.00E-08	4.966787	0.007
655277.91	4180851.63	0.000	0.000	0.001	0.023	0.037	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.53E-08	4.89E-06	7.02E-08	4.983664	0.007
655297.91	4180851.63	0.000	0.000	0.001	0.023	0.037	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.51E-08	4.91E-06	7.06E-08	5.010225	0.007
655317.91	4180851.63	0.000	0.000	0.001	0.023	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-08	4.96E-06	7.12E-08	5.053462	0.008
655337.91	4180851.63	0.000	0.000	0.001	0.024	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-08	5.02E-06	7.21E-08	5.114283	0.008
655357.91	4180851.63	0.000	0.000	0.001	0.024	0.039	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-08	5.11E-06	7.34E-08	5.206203	0.008
655377.91	4180851.63	0.000	0.000	0.001	0.025	0.040	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-08	5.25E-06	7.54E-08	5.350324	0.008
655397.91	4180851.63	0.000	0.000	0.001	0.026	0.042	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.43E-08	5.48E-06	7.87E-08	5.584907	0.008
655417.91	4180851.63	0.000	0.000	0.001	0.028	0.045	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-08	5.87E-06	8.43E-08	5.980102	0.009
655437.91	4180851.63	0.000	0.000	0.001	0.031	0.050	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.39E-08	6.53E-06	9.37E-08	6.648905	0.010
655457.91	4180851.63	0.000	0.000	0.001	0.037	0.060	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.38E-08	7.74E-06	1.11E-07	7.873195	0.012
655197.91	4180871.63	0.001	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.60E-08	6.19E-06	8.89E-08	6.308737	0.010
655217.91	4180871.63	0.001	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.58E-08	6.19E-06	8.89E-08	6.307533	0.010
655237.91	4180871.63	0.001	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.57E-08	6.18E-06	8.87E-08	6.293531	0.009
655257.91	4180871.63	0.001	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-08	6.16E-06	8.85E-08	6.277296	0.009
655277.91	4180871.63	0.000	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.53E-08	6.15E-06	8.84E-08	6.26837	0.009
655297.91	4180871.63	0.000	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.51E-08	6.16E-06	8.84E-08	6.272097	0.009
655317.91	4180871.63	0.000	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-08	6.17E-06	8.85E-08	6.27902	0.009
655337.91	4180871.63	0.000	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-08	6.19E-06	8.88E-08	6.300768	0.010
655357.91	4180871.63	0.000	0.000	0.001	0.030	0.048	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-08	6.25E-06	8.97E-08	6.360644	0.010
655377.91	4180871.63	0.000	0.000	0.001	0.030	0.049	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-08	6.36E-06	9.13E-08	6.474313	0.010
655397.91	4180871.63	0.000	0.000	0.001	0.031	0.050	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-08	6.56E-06	9.41E-08	6.67791	0.010
655417.91	4180871.63	0.000	0.000	0.001	0.033	0.053	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-08	6.89E-06	9.88E-08	7.008375	0.011
655437.91	4180871.63	0.000	0.000	0.001	0.036	0.057	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.39E-08	7.43E-06	1.06E-07	7.557373	0.011
655457.91	4180871.63	0.000	0.000	0.001	0.040	0.065	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-08	8.43E-06	1.21E-07	8.571392	0.013
655030.86	4180794.28	0.001	0.000	0.001	0.009	0.014	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	1.98E-06	2.87E-08	2.039277	0.003
655050.86	4180794.28	0.001	0.000	0.001	0.009	0.014	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	2.05E-06	2.97E-08	2.111534	0.003
655070.86	4180794.28	0.001	0.000	0.001	0.009	0.015	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.74E-08	2.14E-06	3.10E-08	2.202079	0.003
655090.86	4180794.28	0.001	0.000	0.001	0.010	0.016	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.72E-08	2.24E-06	3.25E-08	2.304598	0.003
655110.86	4180794.28	0.001	0.000	0.001	0.010	0.017	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-08	2.36E-06	3.41E-08	2.421946	0.003
655130.86	4180794.28	0.001	0.000	0.001	0.011	0.018	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.68E-08	2.48E-06	3.59E-08	2.547161	0.004
655150.86	4180794.28	0.001	0.000	0.001	0.012	0.019	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-08	2.60E-06	3.75E-08	2.662249	0.004
655030.86	4180814.28	0.001	0.000	0.001	0.009	0.015	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	2.16E-06	3.13E-08	2.220692	0.003
655050.86	4180814.28	0.001	0.000	0.001	0.010	0.016	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	2.26E-06	3.27E-08	2.322574	0.003
655070.86	4180814.28	0.001	0.000	0.001	0.011	0.017	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.74E-08	2.38E-06	3.45E-08	2.446771	0.003
655090.86	4180814.28	0.001	0.000	0.001	0.011	0.018	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.72E-08	2.53E-06	3.65E-08	2.589344	0.004
655110.86	4180814.28	0.001	0.000	0.001	0.012	0.019	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-08	2.69E-06	3.88E-08	2.756446	0.004
655130.86	4180814.28	0.001	0.000	0.001	0.013	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.68E-08	2.86E-06	4.12E-08	2.92491	0.004
655150.86	4180814.28	0.001	0.000	0.001	0.014	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-08	3.01E-06	4.34E-08	3.078954	0.004
655030.86	4180834.28	0.001	0.000	0.001	0.011	0.017	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	2.38E-06	3.44E-08	2.446516	0.003
655050.86	4180834.28	0.001	0.000	0.001	0.011	0.018	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	2.53E-06	3.65E-08	2.5944	0.004
655070.86	4180834.28	0.001	0.000	0.001	0.012	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-08	2.71E-06	3.91E-08	2.772788	0.004
655090.86	4180834.28	0.001	0.000	0.001	0.013	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.71E-08	2.92E-06	4.21E-08	2.987889	0.004
655110.86	4180834.28	0.001	0.000	0.001	0.014	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.69E-08	3.17E-06	4.56E-08	3.239811	0.005
655130.86	4180834.28	0.001	0.000	0.001	0.016	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-08	3.40E-06	4.90E-08	3.478698	0.005
655150.86	4180834.28	0.001	0.000	0.001	0.017	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.65E-08	3.62E-06	5.21E-08	3.696161	0.005
655030.86	4180854.28	0.001	0.000	0.001	0.012	0.019	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-08	2.68E-06	3.86E-08	2.743279	0.004
655050.86	4180854.28	0.001	0.000	0.001	0.013	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	2.90E-06	4.18E-08	2.967945	0.004
655070.86	4180854.28	0.001	0.000	0.001	0.014	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-08	3.17E-06	4.57E-08	3.247018	0.005
655090.86	4180854.28	0.001	0.000	0.001	0.016	0.026	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.71E-08	3.53E-06	5.09E-08	3.610449	0.005
655110.86	4180854.28	0.001	0.000	0.001	0.018	0.029	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.69E-08	3.94E-06	5.66E-08	4.018992	0.006
655130.86	4180854.28	0.001	0.000	0.001	0.020	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-08	4.29E-06	6.18E-08	4.382622	0.006
655150.86	4180854.28	0.001	0.000	0.001	0.021	0.035	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.65E-08	4.59E-06	6.59E-08	4.678745	0.007
655030.86	4180874.28	0.001	0.000	0.001	0.014	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-08	3.09E-06	4.45E-08	3.160988	0.005
655050.86	4180874.28	0.001	0.000	0.001	0.016	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	3.45E-06	4.97E-08	3.528063	0.005
655070.86	4180874.28	0.001	0.000	0.001	0.018	0.029	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-08	3.95E-06	5.69E-08	4.035852	0.006
655090.86	4180874.28	0.001	0.000	0.001	0.022	0.035	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.71E-08	4.66E-06	6.70E-08	4.753308	0.007
655110.86	4180874.28	0.001	0.000	0.001	0.025	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.69E-08	5.38E-06	7.73E-08	5.485747	0.008
655130.86	4180874.28	0.001	0.000	0.001	0.028	0.045	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-08	5.92E-06	8.50E-08	6.032501	0.009
655150.86	4180874.28	0.001	0.000	0.001	0.030	0.048	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.65E-08	6.24E-06	8.96E-08	6.360024	0.010
654770.51	4180915.57	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	3.06E-08	2.48E-06	3.52E-08	2.547055	0.003
654790.51	4180915.57	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.04E-08	2.41E-06	3.45E-08	2.477099	0.003
654810.51	4180915.57	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.01E-08	2.40E-06	3.44E-08	2.461149	0.003
654830.51	4180915.57	0.001	0.000	0.001	0.010	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.99E-08	2.41E-06	3.46E-08	2.474198	0.003
654850.51	4180915.57	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.96E-08	2.44E-06	3.52E-08	2.506657	0.003
654870.51	4180915.57	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.94E-08	2.49E-06	3.59E-08	2.55613	0.004
654890.51	4180915.57	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.92E-08	2.56E-06	3.69E-08	2.624708	0.004
654910.51	4180915.57	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.89E-08	2.65E-06	3.82E-08	2.716944	0.004
654930.51	4180915.57	0.001	0.000	0.001	0.012	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.87E-08	2.77E-06	4.00E-08	2.839991	0.004
654950.51	4180915.57	0.001	0.000	0.001	0.013	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.85E-08	2.94E-06	4.23E-08	3.008254	0.004
654970.51	4180915.57	0.001	0.000	0.001	0.014	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.83E-08	3.16E-06	4.56E-08	3.236048	0.005
654990.51	4180915.57	0.001	0.000	0.001	0.016	0.026	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.80E-08	3.48E-06	5.01E-08	3.558494	0.005
655010.51	4180915.57	0.001	0.000	0.001	0.018	0.030	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	3.98E-06	5.72E-08	4.062975	0.006
655030.51	4180915.57	0.001	0.000	0.001	0.023	0.036	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	4.82E-06	6.93E-08	4.919087	0.007
654770.51	4180935.57	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	3.06E-08	2.67E-06	3.78E-08	2.735362	0.004
654790.51	4180935.57	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.03E-08	2.60E-06	3.72E-08	2.671956	0.004
654810.51	4180935.57	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.01E-08	2.60E-06	3.72E-08	2.662836	0.004
654830.51	4180935.57	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	2.98E-08	2.62E-06	3.76E-08	2.684324	0.004
654850.51	4180935.57	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.96E-08	2.66E-06	3.83E-08	2.727794	0.004
654870.51	4180935.57	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.93E-08	2.72E-06	3.92E-08	2.792287	0.004
654890.51	4180935.57	0.001	0.000	0.001	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.91E-08	2.81E-06	4.05E-08	2.881541	0.004
654910.51	4180935.57	0.001	0.000	0.001	0.013	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.89E-08	2.93E-06	4.22E-08	3.003306	0.004
654930.51	4180935.57	0.001	0.000	0.001	0.014	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.87E-08	3.10E-06	4.46E-08	3.170206	0.005
654950.51	4180935.57	0.001	0.000	0.001	0.015	0.024	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.84E-08	3.33E-06	4.79E-08	3.404412	0.005

654970.51	4180935.57	0.001	0.000	0.001	0.017	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.82E-08	3.66E-06	5.27E-08	3.739289	0.005
654990.51	4180935.57	0.001	0.000	0.001	0.019	0.031	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.80E-08	4.16E-06	5.98E-08	4.248376	0.006
655010.51	4180935.57	0.001	0.000	0.001	0.023	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.78E-08	5.02E-06	7.21E-08	5.116009	0.008
655030.51	4180935.57	0.001	0.000	0.001	0.031	0.051	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-08	6.63E-06	9.51E-08	6.749578	0.010
654770.51	4180955.57	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	3.05E-08	2.88E-06	4.08E-08	2.948104	0.004
654790.51	4180955.57	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.03E-08	2.82E-06	4.03E-08	2.890351	0.004
654810.51	4180955.57	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.00E-08	2.82E-06	4.04E-08	2.888287	0.004
654830.51	4180955.57	0.001	0.000	0.001	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	2.98E-08	2.85E-06	4.09E-08	2.918865	0.004
654850.51	4180955.57	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.95E-08	2.90E-06	4.17E-08	2.9744	0.004
654870.51	4180955.57	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.93E-08	2.98E-06	4.29E-08	3.054557	0.004
654890.51	4180955.57	0.001	0.000	0.001	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.91E-08	3.09E-06	4.45E-08	3.165781	0.005
654910.51	4180955.57	0.001	0.000	0.001	0.015	0.024	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.88E-08	3.25E-06	4.67E-08	3.32105	0.005
654930.51	4180955.57	0.001	0.000	0.001	0.016	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.86E-08	3.46E-06	4.98E-08	3.541366	0.005
654950.51	4180955.57	0.001	0.000	0.001	0.017	0.028	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.84E-08	3.78E-06	5.44E-08	3.863773	0.006
654970.51	4180955.57	0.001	0.000	0.001	0.020	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.82E-08	4.27E-06	6.14E-08	4.362865	0.006
654990.51	4180955.57	0.001	0.000	0.001	0.024	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.80E-08	5.10E-06	7.33E-08	5.200307	0.008
655010.51	4180955.57	0.001	0.000	0.001	0.031	0.050	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-08	6.58E-06	9.44E-08	6.698606	0.010
655030.51	4180955.57	0.001	0.000	0.001	0.044	0.072	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	9.25E-06	1.33E-07	9.41482	0.014
654770.51	4180975.57	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	3.05E-08	3.13E-06	4.44E-08	3.202034	0.004
654790.51	4180975.57	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.02E-08	3.07E-06	4.39E-08	3.148617	0.004
654810.51	4180975.57	0.001	0.000	0.001	0.013	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.00E-08	3.08E-06	4.41E-08	3.152499	0.004
654830.51	4180975.57	0.001	0.000	0.001	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	2.97E-08	3.12E-06	4.47E-08	3.191193	0.005
654850.51	4180975.57	0.001	0.000	0.001	0.014	0.023	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.95E-08	3.18E-06	4.57E-08	3.25833	0.005
654870.51	4180975.57	0.001	0.000	0.001	0.015	0.024	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.93E-08	3.28E-06	4.72E-08	3.355807	0.005
654890.51	4180975.57	0.001	0.000	0.001	0.015	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.90E-08	3.42E-06	4.91E-08	3.493632	0.005
654910.51	4180975.57	0.001	0.000	0.001	0.016	0.026	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.88E-08	3.61E-06	5.20E-08	3.693509	0.005
654930.51	4180975.57	0.001	0.000	0.001	0.018	0.029	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.86E-08	3.91E-06	5.62E-08	3.994137	0.006
654950.51	4180975.57	0.001	0.000	0.001	0.020	0.033	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.83E-08	4.39E-06	6.31E-08	4.478048	0.007
654970.51	4180975.57	0.001	0.000	0.001	0.024	0.039	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.81E-08	5.23E-06	7.51E-08	5.329455	0.008
654990.51	4180975.57	0.001	0.000	0.001	0.033	0.054	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.79E-08	7.02E-06	1.01E-07	7.147046	0.011
655010.51	4180975.57	0.001	0.000	0.001	0.049	0.079	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-08	1.02E-05	1.46E-07	10.34433	0.016
655030.51	4180975.57	0.001	0.000	0.001	0.067	0.107	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.75E-08	1.38E-05	1.97E-07	13.99339	0.022
654781.96	4181088.17	0.001	0.000	0.001	0.044	0.071	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.00E-08	9.36E-06	1.34E-07	9.522118	0.014
654066.45	4180911.91	0.001	0.001	0.002	0.013	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.25E-08	2.96E-06	4.24E-08	3.041021	0.004
654086.45	4180911.91	0.001	0.001	0.002	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.20E-08	2.81E-06	4.03E-08	2.887308	0.004
654106.45	4180911.91	0.001	0.001	0.002	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.16E-08	2.68E-06	3.85E-08	2.760991	0.004
654186.45	4180911.91	0.001	0.001	0.002	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.99E-08	2.37E-06	3.42E-08	2.446425	0.003
654206.45	4180911.91	0.001	0.001	0.002	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.95E-08	2.33E-06	3.35E-08	2.399399	0.003
654226.45	4180911.91	0.001	0.001	0.002	0.010	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.91E-08	2.29E-06	3.30E-08	2.360188	0.003
654246.45	4180911.91	0.001	0.001	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.87E-08	2.26E-06	3.26E-08	2.327417	0.003
654266.45	4180911.91	0.001	0.001	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.84E-08	2.23E-06	3.22E-08	2.299725	0.003
654286.45	4180911.91	0.001	0.001	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.80E-08	2.21E-06	3.19E-08	2.276238	0.003
654306.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-08	2.19E-06	3.16E-08	2.256323	0.003
654326.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.73E-08	2.17E-06	3.14E-08	2.239267	0.003
654346.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-08	2.16E-06	3.12E-08	2.224779	0.003
654366.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.66E-08	2.14E-06	3.10E-08	2.212466	0.003
654386.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-08	2.13E-06	3.09E-08	2.20202	0.003
654406.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.59E-08	2.13E-06	3.08E-08	2.193301	0.003
654426.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.56E-08	2.12E-06	3.07E-08	2.186297	0.003
654446.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.52E-08	2.11E-06	3.06E-08	2.180598	0.003
654466.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.49E-08	2.11E-06	3.05E-08	2.176321	0.003
654486.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.46E-08	2.11E-06	3.05E-08	2.173299	0.003
654506.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.43E-08	2.11E-06	3.05E-08	2.171506	0.003
654526.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.40E-08	2.11E-06	3.05E-08	2.170825	0.003
654546.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.37E-08	2.11E-06	3.05E-08	2.171374	0.003
654566.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.34E-08	2.11E-06	3.05E-08	2.173059	0.003
654586.45	4180911.91	0.001	0.000	0.001	0.009	0.014	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.31E-08	2.11E-06	3.06E-08	2.176056	0.003
654606.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.28E-08	2.12E-06	3.06E-08	2.180504	0.003
654626.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.25E-08	2.12E-06	3.07E-08	2.186583	0.003
654646.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.23E-08	2.13E-06	3.08E-08	2.194355	0.003
654666.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.20E-08	2.14E-06	3.10E-08	2.205038	0.003
654686.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.17E-08	2.16E-06	3.12E-08	2.219341	0.003
654706.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.14E-08	2.18E-06	3.14E-08	2.239631	0.003
654726.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.12E-08	2.21E-06	3.19E-08	2.272542	0.003
654746.45	4180911.91	0.001	0.000	0.001	0.009	0.015	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.09E-08	2.29E-06	3.28E-08	2.352561	0.003
654066.45	4180931.91	0.001	0.001	0.002	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.24E-08	3.16E-06	4.53E-08	3.250494	0.004
654086.45	4180931.91	0.001	0.001	0.002	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.20E-08	2.99E-06	4.29E-08	3.071254	0.004
654106.45	4180931.91	0.001	0.001	0.002	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.15E-08	2.85E-06	4.09E-08	2.929849	0.004
654186.45	4180931.91	0.001	0.001	0.002	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.99E-08	2.52E-06	3.63E-08	2.598966	0.003
654206.45	4180931.91	0.001	0.001	0.002	0.010	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.95E-08	2.48E-06	3.57E-08	2.551609	0.003
654226.45	4180931.91	0.001	0.001	0.002	0.010	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.91E-08	2.44E-06	3.52E-08	2.512667	0.003
654246.45	4180931.91	0.001	0.001	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.87E-08	2.41E-06	3.47E-08	2.480203	0.003
654266.45	4180931.91	0.001	0.001	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.83E-08	2.38E-06	3.44E-08	2.453143	0.003
654286.45	4180931.91	0.001	0.001	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-08	2.36E-06	3.40E-08	2.430288	0.003
654306.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.76E-08	2.34E-06	3.38E-08	2.411012	0.003
654326.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-08	2.32E-06	3.36E-08	2.394655	0.003
654346.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-08	2.31E-06	3.34E-08	2.38065	0.003
654366.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-08	2.30E-06	3.32E-08	2.368798	0.003
654386.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-08	2.29E-06	3.31E-08	2.358686	0.003
654406.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.58E-08	2.28E-06	3.30E-08	2.350275	0.003
654426.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.55E-08	2.27E-06	3.29E-08	2.343384	0.003
654446.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.52E-08	2.27E-06	3.28E-08	2.337857	0.003
654466.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.49E-08	2.27E-06	3.28E-08	2.333868	0.003
654486.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.46E-08	2.26E-06	3.27E-08	2.331107	0.003
654506.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.42E-08	2.26E-06	3.27E-08	2.329766	0.003
654526.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.39E-08	2.26E-06	3.27E-08	2.329736	0.003
654546.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.36E-08	2.26E-06	3.28E-08	2.330949	0.003
654566.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.34E-08	2.27E-06	3.28E-08	2.333556	0.003
654586.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.31E-08	2.27E-06	3.29E-08	2.33757	0.003
654606.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.28E-08	2.28E-06	3.29E-08	2.342943	0.003
654626.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.25E-08	2.28E-06	3.30E-08	2.349638	0.003
654646.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.22E-08	2.29E-06	3.32E-08	2.358774	0.003
654666.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.19E-08	2.31E-06	3.33E-08	2.370522	0.003
654686.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.17E-08	2.32E-06	3.35E-08	2.387204	0.003
654706.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.14E-08	2.35E-06	3.39E-08	2.412589	0.003
654726.45	4180931.91	0.001	0.000	0.001	0.010	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.11E-08	2.39E-06	3.44E-08	2.455122	0.003
654746.45	4180931.91	0.001	0.000	0.001	0.010	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.09E-08	2.48E-06	3.55E-08	2.546498	0.003
654066.45	4180951.91	0.001	0.001	0.002	0.015	0.023	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.23E-08	3.38E-06	4.84E-08	3.467005	0.005
654086.45	4180951.91	0.001	0.001	0.002	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.19E-08	3.18E-06	4.57E-08	3.26837	0.004
654106.45	4180951.91	0.001	0.001	0.002	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.14E-08	3.03E-06	4.35E-08	3.116619	0.004
654186.45	4180951.91	0.001	0.001	0.002	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.98E-08	2.70E-06	3.89E-08	2.779883	0.004

654206.45	4180951.91	0.001	0.001	0.002	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.94E-08	2.66E-06	3.83E-08	2.733483	0.004
654226.45	4180951.91	0.001	0.001	0.002	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.90E-08	2.62E-06	3.78E-08	2.695576	0.004
654246.45	4180951.91	0.001	0.001	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.86E-08	2.59E-06	3.73E-08	2.664223	0.004
654266.45	4180951.91	0.001	0.001	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.82E-08	2.56E-06	3.70E-08	2.638273	0.004
654286.45	4180951.91	0.001	0.001	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-08	2.54E-06	3.67E-08	2.61657	0.004
654306.45	4180951.91	0.001	0.001	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-08	2.52E-06	3.64E-08	2.598196	0.004
654326.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.72E-08	2.51E-06	3.62E-08	2.582626	0.003
654346.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.68E-08	2.50E-06	3.61E-08	2.569519	0.003
654366.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.65E-08	2.49E-06	3.59E-08	2.558285	0.003
654386.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.61E-08	2.48E-06	3.58E-08	2.548858	0.003
654406.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.58E-08	2.47E-06	3.57E-08	2.540841	0.003
654426.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.55E-08	2.46E-06	3.56E-08	2.534328	0.003
654446.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.51E-08	2.46E-06	3.55E-08	2.529147	0.003
654466.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.48E-08	2.46E-06	3.55E-08	2.525323	0.003
654486.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.45E-08	2.45E-06	3.55E-08	2.522804	0.003
654506.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.42E-08	2.45E-06	3.54E-08	2.521757	0.003
654526.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.39E-08	2.45E-06	3.55E-08	2.522179	0.003
654546.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.36E-08	2.46E-06	3.55E-08	2.524127	0.003
654566.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.33E-08	2.46E-06	3.55E-08	2.527674	0.003
654586.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.30E-08	2.46E-06	3.56E-08	2.532244	0.003
654606.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.27E-08	2.47E-06	3.57E-08	2.537848	0.003
654626.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.24E-08	2.48E-06	3.58E-08	2.545063	0.004
654646.45	4180951.91	0.001	0.000	0.001	0.011	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.22E-08	2.49E-06	3.59E-08	2.55435	0.004
654666.45	4180951.91	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.19E-08	2.50E-06	3.61E-08	2.567527	0.004
654686.45	4180951.91	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.16E-08	2.52E-06	3.63E-08	2.58664	0.004
654706.45	4180951.91	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.13E-08	2.55E-06	3.67E-08	2.615431	0.004
654726.45	4180951.91	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.11E-08	2.59E-06	3.73E-08	2.662465	0.004
654746.45	4180951.91	0.001	0.000	0.001	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.08E-08	2.69E-06	3.84E-08	2.757383	0.004
654186.45	4180971.91	0.001	0.001	0.002	0.013	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.97E-08	2.92E-06	4.21E-08	3.003636	0.004
654206.45	4180971.91	0.001	0.001	0.002	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.93E-08	2.88E-06	4.15E-08	2.959299	0.004
654226.45	4180971.91	0.001	0.001	0.002	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.89E-08	2.84E-06	4.10E-08	2.923265	0.004
654246.45	4180971.91	0.001	0.001	0.001	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.85E-08	2.81E-06	4.06E-08	2.893714	0.004
654266.45	4180971.91	0.001	0.001	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.82E-08	2.79E-06	4.02E-08	2.869243	0.004
654286.45	4180971.91	0.001	0.001	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.78E-08	2.77E-06	4.00E-08	2.848809	0.004
654306.45	4180971.91	0.001	0.001	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-08	2.75E-06	3.97E-08	2.831508	0.004
654326.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.71E-08	2.74E-06	3.95E-08	2.816838	0.004
654346.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.67E-08	2.73E-06	3.94E-08	2.804434	0.004
654366.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.64E-08	2.72E-06	3.92E-08	2.793931	0.004
654386.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.61E-08	2.71E-06	3.91E-08	2.785206	0.004
654406.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.57E-08	2.70E-06	3.90E-08	2.777877	0.004
654426.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.54E-08	2.70E-06	3.90E-08	2.771971	0.004
654446.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.51E-08	2.69E-06	3.89E-08	2.767204	0.004
654466.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.48E-08	2.69E-06	3.89E-08	2.763666	0.004
654486.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.44E-08	2.69E-06	3.88E-08	2.761566	0.004
654506.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.41E-08	2.69E-06	3.88E-08	2.760692	0.004
654526.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.38E-08	2.69E-06	3.88E-08	2.761529	0.004
654546.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.35E-08	2.69E-06	3.89E-08	2.763339	0.004
654566.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.32E-08	2.69E-06	3.89E-08	2.766232	0.004
654586.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.29E-08	2.70E-06	3.90E-08	2.769762	0.004
654606.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.27E-08	2.70E-06	3.90E-08	2.774811	0.004
654626.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.24E-08	2.71E-06	3.91E-08	2.782059	0.004
654646.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.21E-08	2.72E-06	3.93E-08	2.793086	0.004
654666.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.18E-08	2.74E-06	3.95E-08	2.808342	0.004
654686.45	4180971.91	0.001	0.000	0.001	0.012	0.019	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.16E-08	2.76E-06	3.98E-08	2.829647	0.004
654706.45	4180971.91	0.001	0.000	0.001	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.13E-08	2.79E-06	4.02E-08	2.860562	0.004
654726.45	4180971.91	0.001	0.000	0.001	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.10E-08	2.84E-06	4.08E-08	2.909041	0.004
654746.45	4180971.91	0.001	0.000	0.001	0.012	0.020	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	3.08E-08	2.93E-06	4.19E-08	3.006685	0.004
654186.45	4180991.91	0.001	0.001	0.002	0.014	0.023	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.96E-08	3.21E-06	4.62E-08	3.293926	0.005
654206.45	4180991.91	0.001	0.001	0.002	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.92E-08	3.17E-06	4.56E-08	3.252459	0.005
654226.45	4180991.91	0.001	0.001	0.002	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.89E-08	3.13E-06	4.51E-08	3.218792	0.004
654246.45	4180991.91	0.001	0.001	0.001	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.85E-08	3.11E-06	4.48E-08	3.191158	0.004
654266.45	4180991.91	0.001	0.001	0.001	0.014	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.81E-08	3.09E-06	4.45E-08	3.168188	0.004
654286.45	4180991.91	0.001	0.001	0.001	0.013	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.77E-08	3.07E-06	4.42E-08	3.148752	0.004
654306.45	4180991.91	0.001	0.001	0.001	0.013	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.74E-08	3.05E-06	4.40E-08	3.1323	0.004
654326.45	4180991.91	0.001	0.000	0.001	0.013	0.022	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-08	3.04E-06	4.38E-08	3.118339	0.004
654346.45	4180991.91	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.67E-08	3.03E-06	4.36E-08	3.106666	0.004
654366.45	4180991.91	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.63E-08	3.02E-06	4.35E-08	3.096682	0.004
654386.45	4180991.91	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.60E-08	3.01E-06	4.34E-08	3.088327	0.004
654406.45	4180991.91	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.57E-08	3.00E-06	4.33E-08	3.081495	0.004
654426.45	4180991.91	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.53E-08	3.00E-06	4.33E-08	3.076183	0.004
654446.45	4180991.91	0.001	0.000	0.001	0.013	0.021	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.50E-08	2.99E-06	4.32E-08	3.071852	0.004
654186.45	4181011.91	0.001	0.001	0.002	0.016	0.026	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.96E-08	3.59E-06	5.17E-08	3.685894	0.005
654206.45	4181011.91	0.001	0.001	0.002	0.016	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.92E-08	3.56E-06	5.12E-08	3.648004	0.005
654226.45	4181011.91	0.001	0.001	0.001	0.016	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.88E-08	3.53E-06	5.08E-08	3.617095	0.005
654246.45	4181011.91	0.001	0.001	0.001	0.016	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.84E-08	3.50E-06	5.04E-08	3.591519	0.005
654266.45	4181011.91	0.001	0.000	0.001	0.015	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.69E-08	3.44E-06	4.95E-08	3.522407	0.005
654346.45	4181011.91	0.001	0.000	0.001	0.015	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.66E-08	3.42E-06	4.94E-08	3.510951	0.005
654366.45	4181011.91	0.001	0.000	0.001	0.015	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.63E-08	3.42E-06	4.92E-08	3.501235	0.005
654386.45	4181011.91	0.001	0.000	0.001	0.015	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.59E-08	3.41E-06	4.91E-08	3.493071	0.005
654406.45	4181011.91	0.001	0.000	0.001	0.015	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.56E-08	3.40E-06	4.90E-08	3.486383	0.005
654426.45	4181011.91	0.001	0.000	0.001	0.015	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.53E-08	3.40E-06	4.90E-08	3.480933	0.005
654446.45	4181011.91	0.001	0.000	0.001	0.015	0.025	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.49E-08	3.39E-06	4.89E-08	3.476134	0.005
653986.45	4181031.91	0.001	0.001	0.002	0.030	0.049	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.38E-08	6.70E-06	9.55E-08	6.839371	0.010
654006.45	4181031.91	0.001	0.001	0.002	0.026	0.042	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.33E-08	5.77E-06	8.24E-08	5.89164	0.009
654026.45	4181031.91	0.001	0.001	0.002	0.023	0.038	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.29E-08	5.21E-06	7.46E-08	5.331019	0.008
654366.45	4181031.91	0.001	0.000	0.001	0.018	0.029	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.62E-08	3.98E-06	5.73E-08	4.071599	0.006
654386.45	4181031.91	0.001	0.000	0.001	0.018	0.029	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.58E-08	3.97E-06	5.72E-08	4.063133	0.006
654406.45	4181031.91	0.001	0.000	0.001	0.018	0.029	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.55E-08	3.96E-06	5.71E-08	4.055128	0.006
654426.45	4181031.91	0.001	0.000	0.001	0.018	0.029	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.52E-08	3.95E-06	5.70E-08	4.046629	0.006
654446.45	4181031.91	0.001	0.000	0.001	0.018	0.029	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.49E-08	3.95E-06	5.69E-08	4.039184	0.006
653986.45	4181051.91	0.001	0.001	0.002	0.031	0.050	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.37E-08	6.92E-06	9.87E-08	7.061794	0.010
654006.45	4181051.91	0.001	0.001	0.002	0.028	0.045	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.32E-08	6.18E-06	8.83E-08	6.313028	0.009
654026.45	4181051.91	0.001	0.001	0.002	0.026	0.042	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.27E-08	5.77E-06	8.26E-08	5.895248	0.009
654366.45	4181051.91	0.001	0.000	0.001	0.022	0.036	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.61E-08	4.83E-06	6.95E-08	4.938166	0.007
654386.45	4181051.91	0.001	0.000	0.001	0.022	0.036	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.58E-08	4.82E-06	6.94E-08	4.92882	0.007
654406.45	4181051.91	0.001	0.000	0.001	0.022	0.036	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.54E-08	4.82E-06	6.93E-08	4.919764	0.007
654426.45	4181051.91	0.001	0.000	0.001	0.022	0.036	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.51E-08	4.80E-06	6.91E-08	4.907118	0.007
654446.45	4181051.91	0.001	0.000	0.001	0.022	0.036	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.48E-08	4.79E-06	6.89E-08	4.893805	0.007
653986.45	4181071.91	0.001	0.001	0.002	0.035	0.057	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.36E-08	7.69E-06	1.10E-07	7.847081	0.012
654006.45	4181071.91	0.001	0.001	0.002	0.033	0.053	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.31E-08	7.19E-06	1.03E-07	7.331836	0.011
654026.45	4181071.91	0.001	0.001	0.002	0.032	0.051	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	4.26E-08	6.93E-06	9.92E-08	7.076682	0.010

654366.45	4181071.91	0.001	0.000	0.001	0.030	0.048	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.60E-08	6.31E-06	9.06E-08	6.432131	0.010
654386.45	4181071.91	0.001	0.000	0.001	0.029	0.047	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.57E-08	6.29E-06	9.04E-08	6.416399	0.010
654406.45	4181071.91	0.001	0.000	0.001	0.029	0.047	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.54E-08	6.27E-06	9.01E-08	6.399771	0.010
654426.45	4181071.91	0.001	0.000	0.001	0.029	0.047	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.50E-08	6.25E-06	8.98E-08	6.376872	0.009
654446.45	4181071.91	0.001	0.000	0.001	0.029	0.047	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.47E-08	6.22E-06	8.93E-08	6.341538	0.009
653986.45	4181091.91	0.001	0.001	0.002	0.048	0.077	0.001	0.002	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	4.34E-08	1.02E-05	1.46E-07	10.41728	0.016
654006.45	4181091.91	0.001	0.001	0.002	0.047	0.075	0.001	0.002	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	4.30E-08	9.97E-06	1.43E-07	10.15553	0.015
654026.45	4181091.91	0.001	0.001	0.002	0.046	0.075	0.001	0.002	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	4.25E-08	9.84E-06	1.41E-07	10.02816	0.015
654366.45	4181091.91	0.001	0.000	0.001	0.045	0.073	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.59E-08	9.45E-06	1.36E-07	9.624974	0.015
654386.45	4181091.91	0.001	0.000	0.001	0.045	0.072	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.56E-08	9.42E-06	1.35E-07	9.587028	0.014
654406.45	4181091.91	0.001	0.000	0.001	0.045	0.072	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.53E-08	9.36E-06	1.34E-07	9.533579	0.014
654426.45	4181091.91	0.001	0.000	0.001	0.044	0.071	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.50E-08	9.29E-06	1.33E-07	9.461532	0.014
654446.45	4181091.91	0.001	0.000	0.001	0.044	0.071	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.46E-08	9.18E-06	1.32E-07	9.35002	0.014
653851.21	4180757.52	0.001	0.001	0.002	0.007	0.012	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.84E-08	1.93E-06	2.76E-08	2.001026	0.002
653871.21	4180757.52	0.001	0.001	0.002	0.007	0.012	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.78E-08	1.92E-06	2.75E-08	1.991545	0.002
653891.21	4180757.52	0.001	0.001	0.002	0.007	0.012	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.73E-08	1.90E-06	2.73E-08	1.977236	0.002
653911.21	4180757.52	0.001	0.001	0.002	0.007	0.012	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.67E-08	1.89E-06	2.71E-08	1.961223	0.002
653931.21	4180757.52	0.001	0.001	0.002	0.007	0.012	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.62E-08	1.88E-06	2.69E-08	1.94886	0.002
653951.21	4180757.52	0.001	0.001	0.002	0.007	0.012	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.57E-08	1.86E-06	2.68E-08	1.93569	0.002
653851.21	4180777.52	0.001	0.001	0.002	0.008	0.013	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.83E-08	2.06E-06	2.96E-08	2.13971	0.003
653871.21	4180777.52	0.001	0.001	0.002	0.008	0.013	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.78E-08	2.05E-06	2.94E-08	2.129446	0.003
653891.21	4180777.52	0.001	0.001	0.002	0.008	0.013	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.72E-08	2.04E-06	2.92E-08	2.113844	0.003
653911.21	4180777.52	0.001	0.001	0.002	0.008	0.013	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.67E-08	2.02E-06	2.90E-08	2.095351	0.003
653931.21	4180777.52	0.001	0.001	0.002	0.008	0.013	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.62E-08	2.01E-06	2.88E-08	2.080752	0.003
653951.21	4180777.52	0.001	0.001	0.002	0.008	0.013	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.56E-08	1.99E-06	2.86E-08	2.064896	0.003
653851.21	4180797.52	0.001	0.001	0.002	0.009	0.014	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.83E-08	2.23E-06	3.19E-08	2.305879	0.003
653871.21	4180797.52	0.001	0.001	0.002	0.009	0.014	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.77E-08	2.21E-06	3.18E-08	2.29411	0.003
653891.21	4180797.52	0.001	0.001	0.002	0.009	0.014	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.72E-08	2.20E-06	3.15E-08	2.276865	0.003
653911.21	4180797.52	0.001	0.001	0.002	0.009	0.014	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.66E-08	2.18E-06	3.13E-08	2.255347	0.003
653931.21	4180797.52	0.001	0.001	0.002	0.009	0.014	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.61E-08	2.16E-06	3.10E-08	2.237653	0.003
653951.21	4180797.52	0.001	0.001	0.002	0.009	0.014	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.56E-08	2.14E-06	3.08E-08	2.218353	0.003
653851.21	4180817.52	0.001	0.001	0.002	0.010	0.016	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.82E-08	2.43E-06	3.48E-08	2.508632	0.003
653871.21	4180817.52	0.001	0.001	0.002	0.010	0.016	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.77E-08	2.41E-06	3.46E-08	2.494415	0.003
653891.21	4180817.52	0.001	0.001	0.002	0.010	0.016	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.71E-08	2.39E-06	3.43E-08	2.474896	0.003
653911.21	4180817.52	0.001	0.001	0.002	0.010	0.016	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.66E-08	2.37E-06	3.40E-08	2.44938	0.003
653931.21	4180817.52	0.001	0.001	0.002	0.010	0.015	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.61E-08	2.35E-06	3.37E-08	2.427515	0.003
653951.21	4180817.52	0.001	0.001	0.002	0.009	0.015	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.55E-08	2.32E-06	3.34E-08	2.403485	0.003
653851.21	4180837.52	0.001	0.001	0.002	0.011	0.018	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-08	2.68E-06	3.84E-08	2.761879	0.004
653871.21	4180837.52	0.001	0.001	0.002	0.011	0.018	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.76E-08	2.66E-06	3.81E-08	2.743684	0.004
653891.21	4180837.52	0.001	0.001	0.002	0.011	0.018	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.70E-08	2.64E-06	3.78E-08	2.721092	0.004
653911.21	4180837.52	0.001	0.001	0.002	0.011	0.017	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.65E-08	2.61E-06	3.74E-08	2.6901	0.004
653931.21	4180837.52	0.001	0.001	0.002	0.011	0.017	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.60E-08	2.58E-06	3.70E-08	2.662083	0.003
653951.21	4180837.52	0.001	0.001	0.002	0.011	0.017	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.55E-08	2.55E-06	3.66E-08	2.632057	0.003
653851.21	4180857.52	0.001	0.001	0.002	0.013	0.020	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.81E-08	3.00E-06	4.30E-08	3.087828	0.004
653871.21	4180857.52	0.001	0.001	0.002	0.013	0.020	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.75E-08	2.97E-06	4.26E-08	3.063634	0.004
653891.21	4180857.52	0.001	0.001	0.002	0.013	0.020	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.70E-08	2.95E-06	4.23E-08	3.036304	0.004
653911.21	4180857.52	0.001	0.001	0.002	0.012	0.020	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.64E-08	2.91E-06	4.17E-08	2.997772	0.004
653931.21	4180857.52	0.001	0.001	0.002	0.012	0.020	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.59E-08	2.87E-06	4.12E-08	2.960736	0.004
653951.21	4180857.52	0.001	0.001	0.002	0.012	0.019	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.54E-08	2.84E-06	4.07E-08	2.922298	0.004
650568.61	4181583.03	0.007	0.009	0.009	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.10E-07	2.52E-06	5.89E-08	2.886518	0.005
650588.61	4181583.03	0.007	0.009	0.009	0.000	0.001	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.25E-07	2.64E-06	6.12E-08	3.027042	0.005
650608.61	4181583.03	0.008	0.009	0.010	0.000	0.001	0.006	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.45E-07	2.79E-06	6.37E-08	3.203093	0.005
650628.61	4181583.03	0.008	0.009	0.011	0.000	0.001	0.006	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.70E-07	2.99E-06	6.61E-08	3.424648	0.006
650648.61	4181583.03	0.008	0.009	0.011	0.000	0.001	0.005	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.01E-07	3.21E-06	6.81E-08	3.681803	0.006
650668.61	4181583.03	0.009	0.010	0.012	0.000	0.001	0.005	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.38E-07	3.49E-06	6.99E-08	3.993474	0.007
650548.61	4181603.03	0.007	0.009	0.009	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.95E-07	2.41E-06	6.08E-08	2.768216	0.004
650568.61	4181603.03	0.008	0.009	0.009	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.08E-07	2.52E-06	6.32E-08	2.893155	0.005
650588.61	4181603.03	0.008	0.010	0.010	0.000	0.001	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.16E-07	2.60E-06	6.53E-08	2.981969	0.005
650608.61	4181603.03	0.008	0.010	0.010	0.000	0.001	0.006	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.35E-07	2.75E-06	6.81E-08	3.157777	0.005
650628.61	4181603.03	0.009	0.010	0.011	0.000	0.001	0.006	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.64E-07	2.97E-06	7.11E-08	3.40554	0.005
650648.61	4181603.03	0.009	0.010	0.012	0.000	0.001	0.005	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.94E-07	3.20E-06	7.36E-08	3.666205	0.006
650668.61	4181603.03	0.009	0.010	0.013	0.000	0.001	0.005	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.32E-07	3.48E-06	7.56E-08	3.987097	0.006
650528.61	4181623.03	0.007	0.010	0.008	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.79E-07	2.31E-06	6.28E-08	2.650183	0.004
650548.61	4181623.03	0.008	0.010	0.009	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.87E-07	2.38E-06	6.50E-08	2.727075	0.004
650568.61	4181623.03	0.008	0.010	0.010	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.04E-07	2.51E-06	6.80E-08	2.885883	0.005
650588.61	4181623.03	0.008	0.011	0.010	0.000	0.001	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.15E-07	2.62E-06	7.06E-08	3.003397	0.005
650608.61	4181623.03	0.009	0.011	0.011	0.000	0.001	0.006	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.31E-07	2.75E-06	7.34E-08	3.153209	0.005
650628.61	4181623.03	0.009	0.011	0.012	0.000	0.001	0.006	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.58E-07	2.96E-06	7.69E-08	3.393011	0.005
650648.61	4181623.03	0.010	0.011	0.012	0.000	0.001	0.005	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.88E-07	3.19E-06	7.98E-08	3.662764	0.006
650668.61	4181623.03	0.010	0.012	0.013	0.000	0.001	0.005	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.23E-07	3.46E-06	8.22E-08	3.964362	0.006
650508.61	4181643.03	0.007	0.010	0.008	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.68E-07	2.23E-06	6.46E-08	2.557694	0.004
650528.61	4181643.03	0.008	0.011	0.009	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.72E-07	2.27E-06	6.69E-08	2.606664	0.004
650548.61	4181643.03	0.008	0.011	0.009	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.83E-07	2.37E-06	6.99E-08	2.722236	0.004
650568.61	4181643.03	0.009	0.011	0.010	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.97E-07	2.49E-06	7.31E-08	2.860705	0.004
650588.61	4181643.03	0.009	0.012	0.010	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.12E-07	2.62E-06	7.64E-08	3.004146	0.005
650608.61	4181643.03	0.009	0.012	0.011	0.000	0.001	0.006	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.27E-07	2.74E-06	7.95E-08	3.149648	0.005
650628.61	4181643.03	0.010	0.012	0.012	0.000	0.001	0.006	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.53E-07	2.96E-06	8.35E-08	3.391754	0.005
650648.61	4181643.03	0.011	0.012	0.013	0.000	0.001	0.005	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.83E-07	3.20E-06	8.70E-08	3.667545	0.006
650668.61	4181643.03	0.011	0.013	0.014	0.000	0.001	0.005	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.18E-07	3.47E-06	8.98E-08	3.97354	0.006
650488.61	4181663.03	0.007	0.011	0.008	0.000	0.001	0.007	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.57E-07	2.15E-06	6.59E-08	2.472424	0.004
650508.61	4181663.03	0.008	0.011	0.008	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.61E-07	2.19E-06	6.88E-08	2.522892	0.004
650528.61	4181663.03	0.008	0.012	0.009	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-07	2.27E-06	7.21E-08	2.614091	0.004
650548.61	4181663.03	0.009	0.012	0.009	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.81E-07	2.37E-06	7.58E-08	2.729906	0.004
650568.61	4181663.03	0.009	0.012	0.010	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.93E-07	2.48E-06	7.93E-08	2.855673	0.004
650588.61	4181663.03	0.010	0.013	0.011	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.08E-07	2.62E-06	8.31E-08	3.009182	0.005
650608.61	4181663.03	0.010	0.013	0.012	0.000	0.001	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.23E-07	2.74E-06	8.66E-08	3.152782	0.005
650628.61	4181663.03	0.011	0.014	0.013	0.000	0.001	0.006	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.48E-07	2.96E-06	9.13E-08	3.39838	0.005
650648.61	4181663.03	0.012	0.014	0.014	0.000	0.001	0.005	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.79E-07	3.21E-06	9.55E-08	3.682217	0.006
650668.61	4181663.03	0.012	0.014	0.015	0.000	0.001	0.005	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.13E-07	3.48E-06	9.88E-08	3.987108	0.006
650448.61	4181683.03	0.007	0.011	0.007	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-07	2.02E-06	6.41E-08	2.327431	0.004
650468.61	4181683.03	0.007	0.011	0.008	0.000	0.001	0.007	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-07	2.08E-06	6.72E-08	2.399211	0.004
650488.61	4181683.03	0.008	0.012	0.008	0.000	0.001	0.007	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-07	2.13E-06	7.04E-08	2.450896	0.004
650508.61	4181683.03	0.008	0.012	0.009	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.59E-07	2.19E-06	7.41E-08	2.526644	0.004
650528.61	4181683.03	0.009	0.013	0.009	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-07	2.27E-06	7.80E-08	2.618407	0.004
650548.61	4181683.03	0.009	0.013	0.010	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-07	2.37E-06	8.22E-08	2.725429	0.005
650568.61	4181683.03	0.010	0.014	0.010	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.89E-07	2.48E-06	8.64E-08	2.850762	0.005
650588.61	4181683.03	0.011	0.014	0.011	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.03E-07	2.60E-06	9.07E-08	2.997113	0.005
650608.61	4181683.03	0.011	0.015	0.012	0.000	0.001	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.20E-07	2.76E-06	9.53E-08	3.1744	0.005
650628.61	4181683.03	0.012	0.015	0.013	0.000	0.001	0.006	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.44E-07	2.96E-06	1.01E-07	3.40495	0.005
650648.61	4181683.03	0.013	0.016	0.014	0.000	0.001	0.005	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.73E-07	3.21E-06	1.05E-07	3.684183	0.006
650668.61	4181683.03	0.014	0.016	0.016	0.000	0.001	0.005	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.06E-07	3.48E-06	1.09E-07	3.991533	0.006

650428.61	4181703.03	0.007	0.012	0.007	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-07	1.95E-06	6.58E-08	2.248888	0.004
650448.61	4181703.03	0.007	0.012	0.008	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.40E-07	2.02E-06	6.90E-08	2.328104	0.004
650468.61	4181703.03	0.008	0.012	0.008	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-07	2.07E-06	7.22E-08	2.383648	0.004
650488.61	4181703.03	0.008	0.013	0.008	0.000	0.001	0.007	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-07	2.12E-06	7.59E-08	2.448899	0.004
650508.61	4181703.03	0.009	0.014	0.009	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.56E-07	2.19E-06	8.01E-08	2.527644	0.004
650528.61	4181703.03	0.009	0.014	0.009	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.64E-07	2.27E-06	8.46E-08	2.615299	0.005
650548.61	4181703.03	0.010	0.015	0.010	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.73E-07	2.35E-06	8.93E-08	2.713493	0.005
650568.61	4181703.03	0.011	0.015	0.011	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.83E-07	2.45E-06	9.41E-08	2.828185	0.005
650588.61	4181703.03	0.011	0.016	0.011	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.95E-07	2.56E-06	9.86E-08	2.955133	0.005
650608.61	4181703.03	0.012	0.017	0.012	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.11E-07	2.71E-06	1.04E-07	3.126797	0.006
650628.61	4181703.03	0.013	0.017	0.014	0.000	0.001	0.006	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.36E-07	2.95E-06	1.11E-07	3.397236	0.006
650648.61	4181703.03	0.014	0.018	0.015	0.000	0.001	0.006	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.64E-07	3.19E-06	1.17E-07	3.671048	0.006
650668.61	4181703.03	0.015	0.018	0.016	0.000	0.001	0.005	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.97E-07	3.48E-06	1.22E-07	3.995644	0.007
650408.61	4181723.03	0.007	0.012	0.007	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-07	1.91E-06	6.89E-08	2.211202	0.004
650428.61	4181723.03	0.007	0.013	0.007	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-07	1.93E-06	7.08E-08	2.232305	0.004
650448.61	4181723.03	0.008	0.013	0.008	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-07	1.99E-06	7.44E-08	2.304044	0.004
650468.61	4181723.03	0.008	0.014	0.008	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-07	2.06E-06	7.81E-08	2.374927	0.004
650488.61	4181723.03	0.009	0.014	0.009	0.000	0.001	0.007	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.47E-07	2.12E-06	8.23E-08	2.448701	0.005
650508.61	4181723.03	0.009	0.015	0.009	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.53E-07	2.18E-06	8.69E-08	2.521174	0.005
650528.61	4181723.03	0.010	0.016	0.010	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.58E-07	2.24E-06	9.16E-08	2.591496	0.005
650548.61	4181723.03	0.011	0.017	0.010	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-07	2.32E-06	9.69E-08	2.685384	0.005
650568.61	4181723.03	0.011	0.017	0.011	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-07	2.43E-06	1.03E-07	2.805727	0.006
650588.61	4181723.03	0.012	0.018	0.012	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.88E-07	2.54E-06	1.09E-07	2.940031	0.006
650608.61	4181723.03	0.013	0.019	0.013	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.04E-07	2.70E-06	1.15E-07	3.114729	0.006
650628.61	4181723.03	0.014	0.020	0.014	0.000	0.001	0.006	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.27E-07	2.91E-06	1.23E-07	3.364672	0.007
650648.61	4181723.03	0.015	0.020	0.015	0.000	0.001	0.006	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.49E-07	3.12E-06	1.29E-07	3.597537	0.007
650668.61	4181723.03	0.017	0.021	0.017	0.000	0.001	0.005	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.88E-07	3.47E-06	1.37E-07	3.997291	0.007
650368.61	4181743.03	0.007	0.012	0.006	0.000	0.001	0.008	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.83E-06	6.97E-08	2.120732	0.004
650388.61	4181743.03	0.008	0.013	0.007	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.87E-06	7.23E-08	2.165131	0.004
650408.61	4181743.03	0.008	0.013	0.007	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-07	1.91E-06	7.51E-08	2.210758	0.004
650428.61	4181743.03	0.008	0.014	0.008	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-07	1.94E-06	7.78E-08	2.248302	0.004
650448.61	4181743.03	0.008	0.015	0.008	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.30E-07	1.97E-06	8.02E-08	2.278321	0.005
650468.61	4181743.03	0.009	0.015	0.008	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-07	2.04E-06	8.50E-08	2.362241	0.005
650488.61	4181743.03	0.009	0.016	0.009	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.42E-07	2.09E-06	8.92E-08	2.423901	0.005
650508.61	4181743.03	0.010	0.017	0.009	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-07	2.17E-06	9.50E-08	2.512988	0.005
650528.61	4181743.03	0.011	0.018	0.010	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.58E-07	2.26E-06	1.02E-07	2.621351	0.006
650548.61	4181743.03	0.012	0.019	0.011	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.66E-07	2.35E-06	1.09E-07	2.729905	0.006
650568.61	4181743.03	0.013	0.020	0.012	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.76E-07	2.46E-06	1.16E-07	2.854977	0.007
650588.61	4181743.03	0.014	0.021	0.013	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.88E-07	2.58E-06	1.24E-07	2.996144	0.007
650608.61	4181743.03	0.015	0.022	0.013	0.000	0.001	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.01E-07	2.71E-06	1.30E-07	3.145603	0.007
650628.61	4181743.03	0.015	0.022	0.014	0.000	0.001	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.12E-07	2.82E-06	1.34E-07	3.265402	0.008
650648.61	4181743.03	0.017	0.023	0.016	0.000	0.001	0.006	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.36E-07	3.07E-06	1.44E-07	3.545944	0.008
650668.61	4181743.03	0.019	0.024	0.019	0.000	0.001	0.005	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.75E-07	3.45E-06	1.56E-07	3.985759	0.009
650348.61	4181763.03	0.008	0.013	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.79E-06	7.30E-08	2.082709	0.004
650368.61	4181763.03	0.008	0.014	0.007	0.000	0.001	0.008	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.83E-06	7.59E-08	2.11948	0.004
650388.61	4181763.03	0.008	0.014	0.007	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.85E-06	7.88E-08	2.1535	0.005
650408.61	4181763.03	0.009	0.015	0.007	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.24E-07	1.90E-06	8.22E-08	2.203709	0.005
650428.61	4181763.03	0.009	0.016	0.008	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-07	1.94E-06	8.57E-08	2.253654	0.005
650448.61	4181763.03	0.009	0.016	0.008	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-07	1.96E-06	8.81E-08	2.27464	0.005
650468.61	4181763.03	0.009	0.017	0.008	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.32E-07	2.01E-06	9.24E-08	2.335719	0.005
650488.61	4181763.03	0.010	0.018	0.009	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-07	2.11E-06	9.94E-08	2.447487	0.006
650508.61	4181763.03	0.011	0.019	0.010	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-07	2.18E-06	1.06E-07	2.538349	0.006
650528.61	4181763.03	0.012	0.021	0.010	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.54E-07	2.26E-06	1.13E-07	2.629854	0.007
650548.61	4181763.03	0.013	0.022	0.011	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.62E-07	2.35E-06	1.22E-07	2.735079	0.007
650568.61	4181763.03	0.014	0.023	0.012	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.71E-07	2.46E-06	1.31E-07	2.857503	0.007
650588.61	4181763.03	0.015	0.024	0.013	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.83E-07	2.59E-06	1.40E-07	3.008818	0.008
650608.61	4181763.03	0.016	0.025	0.014	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.92E-07	2.68E-06	1.47E-07	3.121294	0.008
650648.61	4181763.03	0.019	0.027	0.017	0.000	0.001	0.006	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.27E-07	3.05E-06	1.64E-07	3.540741	0.009
650668.61	4181763.03	0.021	0.028	0.020	0.000	0.001	0.005	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.63E-07	3.45E-06	1.79E-07	3.988272	0.010
650308.61	4181783.03	0.007	0.013	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.74E-06	7.32E-08	2.019693	0.004
650328.61	4181783.03	0.008	0.014	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.76E-06	7.62E-08	2.046287	0.004
650348.61	4181783.03	0.008	0.015	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.78E-06	7.93E-08	2.077134	0.005
650368.61	4181783.03	0.008	0.015	0.007	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.81E-06	8.25E-08	2.104535	0.005
650388.61	4181783.03	0.009	0.016	0.007	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.83E-06	8.56E-08	2.133497	0.005
650408.61	4181783.03	0.009	0.017	0.007	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.87E-06	8.97E-08	2.184385	0.005
650428.61	4181783.03	0.010	0.017	0.008	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.93E-06	9.46E-08	2.253496	0.005
650448.61	4181783.03	0.010	0.018	0.008	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.95E-06	9.75E-08	2.272001	0.006
650468.61	4181783.03	0.011	0.020	0.009	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.31E-07	2.03E-06	1.04E-07	2.360803	0.006
650488.61	4181783.03	0.011	0.021	0.009	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.38E-07	2.11E-06	1.11E-07	2.455452	0.006
650508.61	4181783.03	0.012	0.022	0.010	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-07	2.18E-06	1.19E-07	2.545173	0.007
650528.61	4181783.03	0.013	0.024	0.011	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.51E-07	2.27E-06	1.28E-07	2.645795	0.007
650548.61	4181783.03	0.014	0.026	0.012	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.59E-07	2.36E-06	1.38E-07	2.754775	0.008
650568.61	4181783.03	0.016	0.028	0.013	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.67E-07	2.46E-06	1.49E-07	2.872327	0.009
650588.61	4181783.03	0.017	0.029	0.014	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.77E-07	2.58E-06	1.60E-07	3.015174	0.009
650608.61	4181783.03	0.019	0.030	0.015	0.000	0.001	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.88E-07	2.71E-06	1.71E-07	3.172978	0.010
650648.61	4181783.03	0.022	0.032	0.018	0.000	0.001	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.18E-07	3.04E-06	1.89E-07	3.550934	0.011
650668.61	4181783.03	0.025	0.033	0.021	0.000	0.001	0.005	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.53E-07	3.46E-06	2.08E-07	4.021412	0.012
650288.61	4181803.03	0.008	0.014	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-07	1.71E-06	7.58E-08	1.992618	0.004
650308.61	4181803.03	0.008	0.015	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.73E-06	7.92E-08	2.016731	0.005
650328.61	4181803.03	0.008	0.016	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.74E-06	8.25E-08	2.037048	0.005
650348.61	4181803.03	0.009	0.016	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.76E-06	8.59E-08	2.061587	0.005
650368.61	4181803.03	0.009	0.017	0.007	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.80E-06	9.01E-08	2.100317	0.005
650388.61	4181803.03	0.009	0.018	0.007	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.82E-06	9.39E-08	2.130065	0.005
650408.61	4181803.03	0.010	0.019	0.007	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.87E-06	9.92E-08	2.18568	0.006
650428.61	4181803.03	0.011	0.020	0.008	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.92E-06	1.05E-07	2.242439	0.006
650448.61	4181803.03	0.011	0.021	0.008	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.24E-07	1.96E-06	1.10E-07	2.290325	0.006
650468.61	4181803.03	0.012	0.022	0.009	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-07	2.01E-06	1.16E-07	2.349105	0.007
650488.61	4181803.03	0.013	0.024	0.010	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-07	2.10E-06	1.26E-07	2.455705	0.007
650508.61	4181803.03	0.014	0.026	0.010	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.40E-07	2.17E-06	1.35E-07	2.544428	0.008
650528.61	4181803.03	0.015	0.028	0.011	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.47E-07	2.25E-06	1.47E-07	2.648437	0.009
650548.61	4181803.03	0.016	0.031	0.012	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.54E-07	2.35E-06	1.59E-07	2.763146	0.009
650568.61	4181803.03	0.017	0.033	0.013	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.62E-07	2.45E-06	1.73E-07	2.88712	0.010
650588.61	4181803.03	0.019	0.035	0.014	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-07	2.57E-06	1.86E-07	3.025499	0.011
650608.61	4181803.03	0.021	0.037	0.016	0.000	0.001	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.82E-07	2.72E-06	2.00E-07	3.196884	0.012
650648.61	4181803.03	0.025	0.039	0.019	0.000	0.001	0.005	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.09E-07	3.06E-06	2.23E-07	3.587608	0.013
650668.61	4181803.03	0.029	0.040	0.023	0.000	0.001	0.005	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.41E-07	3.48E-06	2.47E-07	4.069955	0.014
650068.61	4181823.03	0.005	0.010	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.68E-06	5.02E-08	1.952946	0.003
650088.61	4181823.03	0.005	0.010	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.68E-06	5.25E-08	1.952238	0.003
650108.61	4181823.03	0.005	0.011	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.66E-06	5.49E-08	1.932222	0.003
650128.61	4181823.03	0.005	0.011	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.66E-06	5.74E-08	1.935485	0.003
650148.61	4181823.03	0.006	0.012	0.004	0.000	0.001	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.65E-06	5.99E-08	1.921834	0.003

650248.61	4181823.03	0.007	0.015	0.005	0.000	0.001	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.67E-06	7.48E-08	1.952888	0.004
650268.61	4181823.03	0.008	0.015	0.005	0.000	0.001	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.69E-06	7.83E-08	1.973146	0.005
650288.61	4181823.03	0.008	0.016	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.70E-06	8.19E-08	1.988248	0.005
650308.61	4181823.03	0.008	0.017	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.71E-06	8.55E-08	2.00623	0.005
650328.61	4181823.03	0.009	0.017	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.73E-06	8.94E-08	2.027856	0.005
650348.61	4181823.03	0.009	0.018	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-07	1.75E-06	9.36E-08	2.055062	0.005
650368.61	4181823.03	0.010	0.019	0.007	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.79E-06	9.87E-08	2.096393	0.006
650388.61	4181823.03	0.010	0.020	0.007	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.82E-06	1.04E-07	2.131275	0.006
650408.61	4181823.03	0.011	0.021	0.008	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.86E-06	1.10E-07	2.180538	0.006
650428.61	4181823.03	0.012	0.022	0.008	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.91E-06	1.17E-07	2.244031	0.007
650448.61	4181823.03	0.012	0.024	0.009	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-07	1.96E-06	1.24E-07	2.306101	0.007
650468.61	4181823.03	0.013	0.026	0.009	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-07	1.98E-06	1.30E-07	2.329121	0.008
650488.61	4181823.03	0.014	0.028	0.010	0.000	0.001	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.30E-07	2.07E-06	1.43E-07	2.446103	0.008
650508.61	4181823.03	0.015	0.031	0.011	0.000	0.001	0.006	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.34E-07	2.14E-06	1.57E-07	2.534978	0.009
650528.61	4181823.03	0.016	0.035	0.011	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-07	2.23E-06	1.72E-07	2.642944	0.010
650548.61	4181823.03	0.018	0.039	0.012	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.47E-07	2.33E-06	1.88E-07	2.764308	0.011
650568.61	4181823.03	0.019	0.042	0.014	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-07	2.44E-06	2.05E-07	2.895256	0.012
650588.61	4181823.03	0.021	0.045	0.015	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.63E-07	2.56E-06	2.21E-07	3.042918	0.013
650608.61	4181823.03	0.023	0.046	0.016	0.000	0.001	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.70E-07	2.67E-06	2.34E-07	3.170966	0.014
650648.61	4181823.03	0.029	0.048	0.020	0.000	0.001	0.005	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.99E-07	3.07E-06	2.68E-07	3.641378	0.015
650668.61	4181823.03	0.035	0.050	0.025	0.000	0.001	0.005	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.28E-07	3.52E-06	2.99E-07	4.143242	0.017
650028.61	4181843.03	0.004	0.010	0.003	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.70E-06	4.86E-08	1.977646	0.003
650048.61	4181843.03	0.005	0.010	0.004	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.70E-06	5.10E-08	1.974065	0.003
650068.61	4181843.03	0.005	0.011	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.68E-06	5.35E-08	1.958168	0.003
650088.61	4181843.03	0.005	0.011	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.17E-07	1.67E-06	5.60E-08	1.945849	0.003
650108.61	4181843.03	0.005	0.012	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.66E-06	5.86E-08	1.93631	0.003
650128.61	4181843.03	0.005	0.013	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.65E-06	6.13E-08	1.927769	0.004
650148.61	4181843.03	0.006	0.013	0.004	0.000	0.001	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.65E-06	6.42E-08	1.924188	0.004
650168.61	4181843.03	0.006	0.014	0.004	0.000	0.001	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.64E-06	6.70E-08	1.916652	0.004
650188.61	4181843.03	0.006	0.014	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.64E-06	7.01E-08	1.919449	0.004
650228.61	4181843.03	0.007	0.015	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.66E-06	7.69E-08	1.942288	0.005
650248.61	4181843.03	0.008	0.016	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.67E-06	8.06E-08	1.951951	0.005
650268.61	4181843.03	0.008	0.017	0.005	0.000	0.001	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.68E-06	8.44E-08	1.965345	0.005
650288.61	4181843.03	0.008	0.018	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.69E-06	8.85E-08	1.982025	0.005
650308.61	4181843.03	0.009	0.018	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.70E-06	9.28E-08	2.002078	0.005
650328.61	4181843.03	0.009	0.019	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.72E-06	9.72E-08	2.021803	0.006
650348.61	4181843.03	0.010	0.020	0.006	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.74E-06	1.02E-07	2.049063	0.006
650368.61	4181843.03	0.010	0.021	0.007	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.77E-06	1.08E-07	2.083867	0.006
650388.61	4181843.03	0.011	0.022	0.007	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.81E-06	1.15E-07	2.135849	0.007
650408.61	4181843.03	0.012	0.024	0.008	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.85E-06	1.22E-07	2.186492	0.007
650428.61	4181843.03	0.013	0.026	0.008	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.89E-06	1.30E-07	2.237847	0.008
650448.61	4181843.03	0.014	0.028	0.009	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.94E-06	1.40E-07	2.296092	0.008
650468.61	4181843.03	0.014	0.030	0.009	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.96E-06	1.49E-07	2.331441	0.009
650488.61	4181843.03	0.015	0.034	0.010	0.000	0.001	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	2.03E-06	1.65E-07	2.42199	0.010
650508.61	4181843.03	0.017	0.039	0.011	0.000	0.001	0.006	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-07	2.12E-06	1.85E-07	2.529796	0.011
650528.61	4181843.03	0.018	0.045	0.012	0.000	0.001	0.006	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.34E-07	2.20E-06	2.07E-07	2.642031	0.013
650548.61	4181843.03	0.020	0.050	0.013	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.40E-07	2.30E-06	2.30E-07	2.770539	0.014
650568.61	4181843.03	0.022	0.055	0.014	0.000	0.001	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.47E-07	2.41E-06	2.50E-07	2.903606	0.015
650588.61	4181843.03	0.023	0.057	0.015	0.000	0.001	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-07	2.49E-06	2.63E-07	3.009858	0.016
649888.61	4181863.03	0.003	0.007	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.58E-07	1.88E-06	3.72E-08	2.180008	0.004
649908.61	4181863.03	0.004	0.007	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-07	1.85E-06	3.89E-08	2.140735	0.004
649928.61	4181863.03	0.004	0.008	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-07	1.84E-06	4.08E-08	2.124819	0.004
649948.61	4181863.03	0.004	0.008	0.003	0.000	0.001	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.43E-07	1.80E-06	4.28E-08	2.089658	0.004
649968.61	4181863.03	0.004	0.009	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.38E-07	1.77E-06	4.49E-08	2.057451	0.004
649988.61	4181863.03	0.004	0.010	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-07	1.75E-06	4.72E-08	2.029451	0.003
650008.61	4181863.03	0.004	0.010	0.003	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-07	1.71E-06	4.94E-08	1.988316	0.003
650028.61	4181863.03	0.005	0.011	0.003	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.69E-06	5.19E-08	1.968987	0.003
650048.61	4181863.03	0.005	0.011	0.004	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-07	1.69E-06	5.45E-08	1.965951	0.003
650068.61	4181863.03	0.005	0.012	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.68E-06	5.72E-08	1.951023	0.003
650088.61	4181863.03	0.005	0.013	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.66E-06	5.99E-08	1.939021	0.004
650108.61	4181863.03	0.005	0.013	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.65E-06	6.28E-08	1.929943	0.004
650128.61	4181863.03	0.006	0.014	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.65E-06	6.58E-08	1.923593	0.004
650148.61	4181863.03	0.006	0.015	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.64E-06	6.87E-08	1.914426	0.004
650168.61	4181863.03	0.006	0.015	0.004	0.000	0.001	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.64E-06	7.21E-08	1.915656	0.004
650188.61	4181863.03	0.007	0.016	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.63E-06	7.54E-08	1.914458	0.004
650208.61	4181863.03	0.007	0.017	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.64E-06	7.91E-08	1.927623	0.005
650228.61	4181863.03	0.007	0.017	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.65E-06	8.29E-08	1.93494	0.005
650248.61	4181863.03	0.008	0.018	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.65E-06	8.69E-08	1.945058	0.005
650268.61	4181863.03	0.008	0.019	0.005	0.000	0.001	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.66E-06	9.12E-08	1.958635	0.005
650288.61	4181863.03	0.009	0.020	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.68E-06	9.58E-08	1.975587	0.006
650308.61	4181863.03	0.009	0.021	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.69E-06	1.01E-07	1.996963	0.006
650328.61	4181863.03	0.010	0.022	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.71E-06	1.06E-07	2.016744	0.006
650348.61	4181863.03	0.010	0.023	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.73E-06	1.12E-07	2.04118	0.007
650368.61	4181863.03	0.011	0.024	0.007	0.000	0.001	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.76E-06	1.19E-07	2.087743	0.007
650388.61	4181863.03	0.012	0.025	0.007	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.80E-06	1.27E-07	2.130651	0.008
650408.61	4181863.03	0.013	0.027	0.008	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-07	1.83E-06	1.36E-07	2.170853	0.008
650428.61	4181863.03	0.014	0.030	0.008	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.86E-06	1.46E-07	2.221047	0.009
650448.61	4181863.03	0.014	0.032	0.008	0.000	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.89E-06	1.56E-07	2.254279	0.009
649868.61	4181883.03	0.003	0.007	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.56E-07	1.87E-06	3.59E-08	2.159888	0.004
649888.61	4181883.03	0.004	0.008	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.55E-07	1.87E-06	3.92E-08	2.160434	0.004
649908.61	4181883.03	0.004	0.008	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-07	1.85E-06	4.12E-08	2.145523	0.004
649928.61	4181883.03	0.004	0.009	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-07	1.82E-06	4.33E-08	2.108852	0.004
649948.61	4181883.03	0.004	0.009	0.003	0.000	0.001	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-07	1.79E-06	4.56E-08	2.075173	0.004
649968.61	4181883.03	0.004	0.010	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.36E-07	1.76E-06	4.80E-08	2.045244	0.004
649988.61	4181883.03	0.004	0.011	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.32E-07	1.74E-06	5.05E-08	2.018322	0.003
650008.61	4181883.03	0.004	0.011	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.70E-06	5.30E-08	1.976999	0.003
650028.61	4181883.03	0.005	0.012	0.003	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.68E-06	5.57E-08	1.958402	0.003
650048.61	4181883.03	0.005	0.013	0.004	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.67E-06	5.86E-08	1.942979	0.003
650068.61	4181883.03	0.005	0.013	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.65E-06	6.15E-08	1.930575	0.004
650088.61	4181883.03	0.005	0.014	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.64E-06	6.46E-08	1.919914	0.004
650108.61	4181883.03	0.006	0.015	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.63E-06	6.77E-08	1.912378	0.004
650128.61	4181883.03	0.006	0.015	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-07	1.64E-06	7.10E-08	1.917086	0.004
650148.61	4181883.03	0.006	0.016	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.63E-06	7.43E-08	1.909337	0.004
650168.61	4181883.03	0.006	0.017	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.62E-06	7.75E-08	1.903995	0.005
650188.61	4181883.03	0.007	0.018	0.005	0.000	0.001	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.63E-06	8.16E-08	1.912266	0.005
650208.61	4181883.03	0.007	0.018	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.63E-06	8.55E-08	1.920172	0.005
650228.61	4181883.03	0.008	0.019	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.64E-06	8.96E-08	1.926568	0.005
650248.61	4181883.03	0.008	0.020	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.64E-06	9.39E-08	1.934786	0.006
650268.61	4181883.03	0.009	0.021	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.65E-06	9.88E-08	1.9516	0.006
650288.61	4181883.03	0.009	0.022	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.67E-06	1.04E-07	1.970207	0.006
650308.61	4181883.03	0.010	0.023	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.68E-06	1.10E-07	1.992165	0.007

650328.61	4181883.03	0.010	0.024	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.70E-06	1.16E-07	2.013014	0.007
650348.61	4181883.03	0.011	0.026	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.71E-06	1.22E-07	2.033087	0.007
650368.61	4181883.03	0.012	0.027	0.007	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.74E-06	1.31E-07	2.073332	0.008
650388.61	4181883.03	0.013	0.029	0.007	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.77E-06	1.40E-07	2.112291	0.008
650408.61	4181883.03	0.014	0.032	0.008	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.81E-06	1.52E-07	2.163526	0.009
650428.61	4181883.03	0.015	0.035	0.008	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.84E-06	1.65E-07	2.212928	0.010
649868.61	4181903.03	0.003	0.007	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.53E-07	1.85E-06	3.79E-08	2.138972	0.004
649888.61	4181903.03	0.004	0.008	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.52E-07	1.84E-06	4.15E-08	2.137109	0.004
649908.61	4181903.03	0.004	0.009	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.49E-07	1.83E-06	4.37E-08	2.125369	0.004
649928.61	4181903.03	0.004	0.010	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.44E-07	1.80E-06	4.61E-08	2.091239	0.004
649948.61	4181903.03	0.004	0.010	0.003	0.000	0.001	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.39E-07	1.77E-06	4.88E-08	2.060085	0.004
649968.61	4181903.03	0.004	0.011	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.34E-07	1.75E-06	5.15E-08	2.031747	0.003
649988.61	4181903.03	0.004	0.012	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-07	1.72E-06	5.43E-08	2.004805	0.003
650008.61	4181903.03	0.005	0.013	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.69E-06	5.72E-08	1.965051	0.003
650028.61	4181903.03	0.005	0.013	0.003	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.67E-06	6.02E-08	1.946563	0.004
650048.61	4181903.03	0.005	0.014	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.65E-06	6.35E-08	1.932948	0.004
650068.61	4181903.03	0.005	0.015	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.64E-06	6.68E-08	1.921689	0.004
650088.61	4181903.03	0.006	0.016	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.63E-06	7.01E-08	1.911858	0.004
650108.61	4181903.03	0.006	0.017	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.62E-06	7.35E-08	1.904255	0.004
650128.61	4181903.03	0.006	0.017	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.62E-06	7.70E-08	1.899542	0.005
650148.61	4181903.03	0.006	0.018	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.62E-06	8.08E-08	1.906028	0.005
650168.61	4181903.03	0.007	0.019	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.61E-06	8.44E-08	1.899874	0.005
650188.61	4181903.03	0.007	0.020	0.005	0.000	0.001	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.61E-06	8.81E-08	1.898661	0.005
650208.61	4181903.03	0.007	0.021	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.61E-06	9.24E-08	1.903392	0.006
650228.61	4181903.03	0.008	0.022	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.61E-06	9.66E-08	1.908875	0.006
650248.61	4181903.03	0.008	0.023	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.62E-06	1.01E-07	1.917213	0.006
650288.61	4181903.03	0.009	0.025	0.006	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.64E-06	1.13E-07	1.950728	0.007
650308.61	4181903.03	0.010	0.026	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.66E-06	1.20E-07	1.982201	0.007
650328.61	4181903.03	0.011	0.027	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.68E-06	1.27E-07	2.009623	0.008
650348.61	4181903.03	0.012	0.029	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.70E-06	1.35E-07	2.029256	0.008
650368.61	4181903.03	0.013	0.031	0.007	0.000	0.001	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.72E-06	1.45E-07	2.069843	0.009
650388.61	4181903.03	0.014	0.034	0.007	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.75E-06	1.57E-07	2.112658	0.010
650408.61	4181903.03	0.015	0.037	0.008	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.77E-06	1.69E-07	2.143135	0.010
649868.61	4181923.03	0.004	0.008	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.50E-07	1.83E-06	4.02E-08	2.119881	0.004
649888.61	4181923.03	0.004	0.009	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.48E-07	1.82E-06	4.40E-08	2.111678	0.004
649908.61	4181923.03	0.004	0.010	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-07	1.81E-06	4.67E-08	2.105032	0.004
649928.61	4181923.03	0.004	0.011	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-07	1.78E-06	4.96E-08	2.073274	0.004
649948.61	4181923.03	0.004	0.012	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.36E-07	1.76E-06	5.26E-08	2.043824	0.004
649968.61	4181923.03	0.004	0.012	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.31E-07	1.73E-06	5.58E-08	2.016204	0.003
649988.61	4181923.03	0.005	0.013	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.24E-07	1.69E-06	5.89E-08	1.972337	0.004
650008.61	4181923.03	0.005	0.014	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.67E-06	6.23E-08	1.954111	0.004
650028.61	4181923.03	0.005	0.015	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.17E-07	1.66E-06	6.59E-08	1.938253	0.004
650048.61	4181923.03	0.005	0.016	0.004	0.000	0.001	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.65E-06	6.95E-08	1.938157	0.004
650068.61	4181923.03	0.005	0.017	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.64E-06	7.31E-08	1.925549	0.005
650088.61	4181923.03	0.006	0.018	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.63E-06	7.68E-08	1.9154	0.005
650108.61	4181923.03	0.006	0.019	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.61E-06	8.04E-08	1.896563	0.005
650128.61	4181923.03	0.006	0.020	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.60E-06	8.42E-08	1.891897	0.005
650148.61	4181923.03	0.007	0.021	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.60E-06	8.81E-08	1.890009	0.005
650168.61	4181923.03	0.007	0.021	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.61E-06	9.23E-08	1.899515	0.006
650188.61	4181923.03	0.007	0.022	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.60E-06	9.68E-08	1.90076	0.006
650208.61	4181923.03	0.008	0.023	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.61E-06	1.01E-07	1.90569	0.006
650228.61	4181923.03	0.008	0.024	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.61E-06	1.06E-07	1.914376	0.007
650248.61	4181923.03	0.009	0.025	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.61E-06	1.12E-07	1.9235	0.007
650268.61	4181923.03	0.009	0.027	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-07	1.62E-06	1.17E-07	1.928246	0.007
650328.61	4181923.03	0.012	0.031	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.66E-06	1.39E-07	1.989998	0.009
650348.61	4181923.03	0.013	0.033	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-07	1.68E-06	1.50E-07	2.02955	0.009
650368.61	4181923.03	0.014	0.035	0.007	0.000	0.001	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.71E-06	1.62E-07	2.068169	0.010
650388.61	4181923.03	0.015	0.039	0.007	0.000	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.74E-06	1.76E-07	2.110668	0.011
649868.61	4181943.03	0.004	0.009	0.003	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.46E-07	1.80E-06	4.26E-08	2.092488	0.004
649888.61	4181943.03	0.004	0.010	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.45E-07	1.80E-06	4.71E-08	2.089064	0.004
649908.61	4181943.03	0.004	0.011	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.43E-07	1.79E-06	5.02E-08	2.084785	0.004
649928.61	4181943.03	0.004	0.012	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.38E-07	1.76E-06	5.37E-08	2.055028	0.004
649948.61	4181943.03	0.004	0.013	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.30E-07	1.72E-06	5.70E-08	2.003517	0.003
649968.61	4181943.03	0.004	0.014	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.69E-06	6.06E-08	1.976182	0.004
649988.61	4181943.03	0.005	0.015	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-07	1.67E-06	6.46E-08	1.958984	0.004
650008.61	4181943.03	0.005	0.016	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.66E-06	6.86E-08	1.943084	0.004
650028.61	4181943.03	0.005	0.017	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.64E-06	7.26E-08	1.928581	0.005
650048.61	4181943.03	0.005	0.019	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.64E-06	7.67E-08	1.92896	0.005
650068.61	4181943.03	0.006	0.020	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.63E-06	8.07E-08	1.917113	0.005
650088.61	4181943.03	0.006	0.021	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.61E-06	8.47E-08	1.90752	0.005
650108.61	4181943.03	0.006	0.022	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.61E-06	8.87E-08	1.900181	0.006
650128.61	4181943.03	0.007	0.022	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.60E-06	9.27E-08	1.89522	0.006
650148.61	4181943.03	0.007	0.023	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.59E-06	9.70E-08	1.892604	0.006
650168.61	4181943.03	0.007	0.024	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.59E-06	1.01E-07	1.892443	0.006
650188.61	4181943.03	0.008	0.025	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.59E-06	1.06E-07	1.894897	0.007
650208.61	4181943.03	0.008	0.026	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.59E-06	1.11E-07	1.899977	0.007
650228.61	4181943.03	0.009	0.027	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-07	1.60E-06	1.16E-07	1.907891	0.007
650248.61	4181943.03	0.009	0.028	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.60E-06	1.22E-07	1.911657	0.008
650268.61	4181943.03	0.010	0.030	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.60E-06	1.29E-07	1.925976	0.008
650348.61	4181943.03	0.013	0.038	0.006	0.000	0.001	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-07	1.65E-06	1.63E-07	2.000851	0.010
650368.61	4181943.03	0.015	0.041	0.007	0.000	0.001	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.69E-06	1.80E-07	2.060504	0.011
650388.61	4181943.03	0.016	0.045	0.007	0.000	0.001	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.71E-06	1.97E-07	2.105126	0.012
649868.61	4181963.03	0.004	0.010	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.43E-07	1.78E-06	4.61E-08	2.073691	0.004
649888.61	4181963.03	0.004	0.011	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.41E-07	1.77E-06	5.07E-08	2.063095	0.004
649908.61	4181963.03	0.004	0.012	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.36E-07	1.74E-06	5.44E-08	2.034524	0.004
649928.61	4181963.03	0.004	0.014	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.31E-07	1.72E-06	5.84E-08	2.007898	0.004
649948.61	4181963.03	0.004	0.015	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-07	1.69E-06	6.27E-08	1.984033	0.004
649968.61	4181963.03	0.005	0.016	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.68E-06	6.73E-08	1.965396	0.004
649988.61	4181963.03	0.005	0.018	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.66E-06	7.19E-08	1.947797	0.005
650008.61	4181963.03	0.005	0.019	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.64E-06	7.64E-08	1.931649	0.005
650028.61	4181963.03	0.005	0.020	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.62E-06	8.08E-08	1.917251	0.005
650048.61	4181963.03	0.006	0.021	0.004	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.61E-06	8.53E-08	1.905907	0.005
650068.61	4181963.03	0.006	0.023	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.60E-06	8.95E-08	1.895582	0.006
650088.61	4181963.03	0.006	0.024	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.60E-06	9.39E-08	1.899897	0.006
650108.61	4181963.03	0.006	0.025	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.59E-06	9.83E-08	1.893094	0.006
650128.61	4181963.03	0.007	0.026	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.58E-06	1.03E-07	1.888361	0.007
650148.61	4181963.03	0.007	0.027	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.58E-06	1.07E-07	1.885888	0.007
650168.61	4181963.03	0.008	0.028	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.58E-06	1.12E-07	1.885746	0.007
650188.61	4181963.03	0.008	0.029	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-07	1.58E-06	1.17E-07	1.888196	0.007
650208.61	4181963.03	0.009	0.030	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.58E-06	1.22E-07	1.893114	0.008
650228.61	4181963.03	0.009	0.031	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.58E-06	1.28E-07	1.900625	0.008

650248.61	4181963.03	0.010	0.032	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.58E-06	1.34E-07	1.911411	0.008
650268.61	4181963.03	0.011	0.034	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-07	1.59E-06	1.42E-07	1.918179	0.009
650288.61	4181963.03	0.011	0.035	0.006	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-07	1.60E-06	1.49E-07	1.935324	0.009
650368.61	4181963.03	0.015	0.047	0.007	0.000	0.001	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.64E-06	1.97E-07	2.030157	0.012
649868.61	4181983.03	0.004	0.011	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.40E-07	1.76E-06	4.99E-08	2.051299	0.004
649888.61	4181983.03	0.004	0.013	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-07	1.75E-06	5.52E-08	2.04065	0.004
649908.61	4181983.03	0.004	0.014	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-07	1.72E-06	5.99E-08	2.016356	0.004
649928.61	4181983.03	0.004	0.016	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-07	1.70E-06	6.51E-08	1.994659	0.004
649948.61	4181983.03	0.005	0.018	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.68E-06	7.05E-08	1.974572	0.004
649968.61	4181983.03	0.005	0.019	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.68E-06	7.61E-08	1.97584	0.005
649988.61	4181983.03	0.005	0.021	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.66E-06	8.14E-08	1.956936	0.005
650008.61	4181983.03	0.005	0.023	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.64E-06	8.65E-08	1.940368	0.006
650028.61	4181983.03	0.005	0.024	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.62E-06	9.14E-08	1.925602	0.006
650048.61	4181983.03	0.006	0.025	0.004	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-07	1.61E-06	9.61E-08	1.912973	0.006
650068.61	4181983.03	0.006	0.026	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.59E-06	1.01E-07	1.902287	0.006
650088.61	4181983.03	0.006	0.028	0.004	0.000	0.001	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.58E-06	1.05E-07	1.893563	0.007
650108.61	4181983.03	0.007	0.029	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.57E-06	1.10E-07	1.875442	0.007
650128.61	4181983.03	0.007	0.030	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.56E-06	1.14E-07	1.871811	0.007
650148.61	4181983.03	0.007	0.031	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.56E-06	1.19E-07	1.880167	0.008
650168.61	4181983.03	0.008	0.032	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.55E-06	1.24E-07	1.870372	0.008
650188.61	4181983.03	0.008	0.033	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.55E-06	1.30E-07	1.873354	0.008
650208.61	4181983.03	0.009	0.034	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-07	1.55E-06	1.36E-07	1.878766	0.009
650228.61	4181983.03	0.010	0.036	0.005	0.000	0.001	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	1.55E-06	1.42E-07	1.886888	0.009
650248.61	4181983.03	0.010	0.037	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.56E-06	1.49E-07	1.897191	0.009
650268.61	4181983.03	0.011	0.038	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.57E-06	1.56E-07	1.910896	0.010
650288.61	4181983.03	0.012	0.040	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-07	1.58E-06	1.65E-07	1.928505	0.010
650308.61	4181983.03	0.013	0.043	0.006	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-07	1.59E-06	1.76E-07	1.949629	0.011
649868.61	4182003.03	0.004	0.013	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.37E-07	1.74E-06	5.51E-08	2.037138	0.004
649888.61	4182003.03	0.004	0.015	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-07	1.73E-06	6.12E-08	2.025953	0.004
649908.61	4182003.03	0.004	0.017	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.30E-07	1.71E-06	6.75E-08	2.004988	0.004
649928.61	4182003.03	0.005	0.019	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.29E-07	1.70E-06	7.43E-08	2.006417	0.005
649948.61	4182003.03	0.005	0.021	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.68E-06	8.11E-08	1.985647	0.005
649968.61	4182003.03	0.005	0.024	0.003	0.000	0.001	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.66E-06	8.77E-08	1.9672	0.006
649988.61	4182003.03	0.005	0.025	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.17E-07	1.64E-06	9.39E-08	1.950078	0.006
650008.61	4182003.03	0.005	0.027	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.62E-06	9.96E-08	1.934522	0.007
650028.61	4182003.03	0.006	0.029	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.61E-06	1.05E-07	1.920843	0.007
650048.61	4182003.03	0.006	0.030	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.07E-07	1.59E-06	1.10E-07	1.908587	0.007
650068.61	4182003.03	0.006	0.031	0.004	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.58E-06	1.15E-07	1.898258	0.008
650088.61	4182003.03	0.007	0.033	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.57E-06	1.20E-07	1.889802	0.008
650108.61	4182003.03	0.007	0.034	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.56E-06	1.25E-07	1.883361	0.008
650128.61	4182003.03	0.007	0.035	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.55E-06	1.29E-07	1.878878	0.008
650148.61	4182003.03	0.008	0.036	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.55E-06	1.35E-07	1.876584	0.009
650168.61	4182003.03	0.008	0.037	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.54E-06	1.40E-07	1.876515	0.009
650188.61	4182003.03	0.009	0.039	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-07	1.54E-06	1.46E-07	1.878734	0.009
650208.61	4182003.03	0.009	0.040	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	1.54E-06	1.52E-07	1.883393	0.010
650228.61	4182003.03	0.010	0.041	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.54E-06	1.59E-07	1.890679	0.010
650248.61	4182003.03	0.011	0.043	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-07	1.54E-06	1.66E-07	1.893022	0.011
650268.61	4182003.03	0.011	0.045	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-07	1.55E-06	1.75E-07	1.913897	0.011
650288.61	4182003.03	0.012	0.047	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-07	1.56E-06	1.84E-07	1.930459	0.012
650308.61	4182003.03	0.013	0.049	0.006	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-07	1.57E-06	1.96E-07	1.950569	0.013
650628.61	4182003.03	0.171	0.048	0.018	0.000	0.001	0.005	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	2.30E-06	9.30E-07	3.416499	0.044
650648.61	4182003.03	0.257	0.042	0.019	0.000	0.001	0.005	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-07	2.36E-06	1.32E-06	3.865449	0.060
650668.61	4182003.03	0.432	0.038	0.020	0.000	0.001	0.005	0.009	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-07	2.37E-06	2.13E-06	4.691713	0.094
649868.61	4182023.03	0.004	0.015	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.36E-07	1.73E-06	6.19E-08	2.030783	0.004
649888.61	4182023.03	0.004	0.018	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.35E-07	1.74E-06	6.96E-08	2.040507	0.004
649908.61	4182023.03	0.004	0.021	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.31E-07	1.71E-06	7.83E-08	2.0179	0.005
649928.61	4182023.03	0.005	0.024	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.26E-07	1.68E-06	8.74E-08	1.998261	0.006
649948.61	4182023.03	0.005	0.027	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-07	1.66E-06	9.60E-08	1.979474	0.006
649968.61	4182023.03	0.005	0.029	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.64E-06	1.04E-07	1.962871	0.007
649988.61	4182023.03	0.005	0.032	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.62E-06	1.11E-07	1.946966	0.007
650008.61	4182023.03	0.006	0.033	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.60E-06	1.17E-07	1.932385	0.008
650028.61	4182023.03	0.006	0.035	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.59E-06	1.22E-07	1.919085	0.008
650048.61	4182023.03	0.006	0.037	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.57E-06	1.28E-07	1.907194	0.009
650068.61	4182023.03	0.006	0.038	0.004	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.56E-06	1.33E-07	1.8973	0.009
650088.61	4182023.03	0.007	0.039	0.004	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.55E-06	1.38E-07	1.889272	0.009
650108.61	4182023.03	0.007	0.041	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.54E-06	1.43E-07	1.883111	0.010
650128.61	4182023.03	0.007	0.042	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.54E-06	1.48E-07	1.878862	0.010
650148.61	4182023.03	0.008	0.043	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.53E-06	1.54E-07	1.876638	0.010
650168.61	4182023.03	0.008	0.045	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-07	1.53E-06	1.60E-07	1.876503	0.011
650188.61	4182023.03	0.009	0.046	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.52E-06	1.67E-07	1.878463	0.011
650208.61	4182023.03	0.010	0.048	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-07	1.52E-06	1.73E-07	1.882935	0.011
650228.61	4182023.03	0.010	0.049	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-07	1.52E-06	1.81E-07	1.890027	0.012
650248.61	4182023.03	0.011	0.051	0.005	0.000	0.001	0.008	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-07	1.53E-06	1.89E-07	1.899936	0.012
650268.61	4182023.03	0.012	0.053	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-07	1.53E-06	1.98E-07	1.912655	0.013
650288.61	4182023.03	0.013	0.055	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	1.54E-06	2.08E-07	1.929052	0.014
650308.61	4182023.03	0.014	0.058	0.006	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	1.55E-06	2.21E-07	1.948812	0.014
650528.61	4182023.03	0.052	0.081	0.011	0.000	0.001	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	1.83E-06	4.59E-07	2.4742	0.026
650548.61	4182023.03	0.063	0.069	0.012	0.000	0.001	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	1.88E-06	4.79E-07	2.545367	0.026
650568.61	4182023.03	0.078	0.060	0.013	0.000	0.001	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	1.95E-06	5.25E-07	2.653322	0.027
650588.61	4182023.03	0.099	0.052	0.014	0.000	0.001	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	2.01E-06	6.06E-07	2.799332	0.030
650608.61	4182023.03	0.131	0.046	0.015	0.000	0.001	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.82E-07	2.07E-06	7.39E-07	2.993515	0.035
650628.61	4182023.03	0.180	0.040	0.016	0.000	0.001	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-07	2.12E-06	9.56E-07	3.258426	0.044
650648.61	4182023.03	0.265	0.036	0.016	0.000	0.001	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-07	2.15E-06	1.34E-06	3.664072	0.060
650668.61	4182023.03	0.436	0.033	0.016	0.000	0.001	0.005	0.008	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-07	2.15E-06	2.13E-06	4.458012	0.094
649868.61	4182043.03	0.004	0.018	0.003	0.000	0.000	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-07	1.72E-06	7.04E-08	2.018603	0.004
649888.61	4182043.03	0.004	0.022	0.003	0.000	0.000	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.33E-07	1.72E-06	8.22E-08	2.031637	0.005
649908.61	4182043.03	0.005	0.027	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.28E-07	1.69E-06	9.53E-08	2.014057	0.006
649928.61	4182043.03	0.005	0.031	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.24E-07	1.67E-06	1.08E-07	1.997778	0.007
649948.61	4182043.03	0.005	0.035	0.003	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.64E-06	1.18E-07	1.981621	0.008
649968.61	4182043.03	0.005	0.038	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.16E-07	1.62E-06	1.27E-07	1.966233	0.009
649988.61	4182043.03	0.005	0.040	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.60E-06	1.34E-07	1.951095	0.009
650008.61	4182043.03	0.006	0.042	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-07	1.59E-06	1.41E-07	1.93734	0.010
650028.61	4182043.03	0.006	0.044	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.57E-06	1.46E-07	1.924079	0.010
650048.61	4182043.03	0.006	0.045	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.56E-06	1.52E-07	1.912685	0.010
650068.61	4182043.03	0.007	0.047	0.004	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.55E-06	1.57E-07	1.902489	0.011
650088.61	4182043.03	0.007	0.048	0.004	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.54E-06	1.63E-07	1.89492	0.011
650108.61	4182043.03	0.007	0.050	0.004	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.53E-06	1.68E-07	1.888886	0.011
650128.61	4182043.03	0.008	0.051	0.004	0.000	0.001	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-07	1.52E-06	1.74E-07	1.884705	0.012
650148.61	4182043.03	0.008	0.053	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	1.51E-06	1.80E-07	1.882544	0.012
650168.61	4182043.03	0.009	0.054	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.51E-06	1.87E-07	1.882483	0.013
650188.61	4182043.03	0.009	0.056	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-07	1.50E-06	1.94E-07	1.884533	0.013

650208.61	4182043.03	0.010	0.058	0.004	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-07	1.50E-06	2.01E-07	1.888909	0.014
650228.61	4182043.03	0.010	0.060	0.005	0.000	0.001	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-07	1.50E-06	2.09E-07	1.896337	0.014
650248.61	4182043.03	0.011	0.062	0.005	0.000	0.001	0.008	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	1.51E-06	2.18E-07	1.906373	0.015
650268.61	4182043.03	0.012	0.064	0.005	0.000	0.001	0.008	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.82E-07	1.51E-06	2.28E-07	1.919071	0.015
650288.61	4182043.03	0.013	0.067	0.005	0.000	0.001	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-07	1.51E-06	2.40E-07	1.934837	0.016
650508.61	4182043.03	0.046	0.084	0.009	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-07	1.73E-06	4.41E-07	2.351206	0.026
650528.61	4182043.03	0.055	0.070	0.010	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-07	1.77E-06	4.45E-07	2.392467	0.025
650548.61	4182043.03	0.066	0.060	0.011	0.000	0.001	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-07	1.81E-06	4.73E-07	2.464748	0.025
650568.61	4182043.03	0.082	0.052	0.012	0.000	0.001	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-07	1.86E-06	5.27E-07	2.564769	0.027
650588.61	4182043.03	0.104	0.046	0.013	0.000	0.001	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-07	1.91E-06	6.15E-07	2.697435	0.030
649948.61	4182063.03	0.005	0.048	0.003	0.000	0.000	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.17E-07	1.63E-06	1.53E-07	1.996922	0.011
649968.61	4182063.03	0.005	0.051	0.003	0.000	0.000	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.61E-06	1.62E-07	1.980976	0.011
649988.61	4182063.03	0.005	0.053	0.003	0.000	0.001	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.59E-06	1.68E-07	1.965563	0.012
650008.61	4182063.03	0.006	0.055	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.57E-06	1.74E-07	1.951533	0.012
650028.61	4182063.03	0.006	0.056	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.56E-06	1.79E-07	1.937927	0.012
650048.61	4182063.03	0.006	0.058	0.003	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.54E-06	1.85E-07	1.92677	0.013
650508.61	4182063.03	0.047	0.072	0.009	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-07	1.68E-06	4.16E-07	2.266111	0.024
650528.61	4182063.03	0.057	0.061	0.010	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-07	1.71E-06	4.29E-07	2.312481	0.023
650548.61	4182063.03	0.069	0.052	0.010	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-07	1.75E-06	4.63E-07	2.381032	0.024
650488.61	4182083.03	0.041	0.073	0.008	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-07	1.61E-06	3.90E-07	2.164185	0.023
650508.61	4182083.03	0.048	0.061	0.009	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-07	1.63E-06	3.91E-07	2.186217	0.022
650528.61	4182083.03	0.057	0.052	0.009	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-07	1.65E-06	4.11E-07	2.23166	0.022
650548.61	4182083.03	0.070	0.046	0.010	0.000	0.001	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-07	1.68E-06	4.50E-07	2.295214	0.023
650488.61	4182103.03	0.041	0.060	0.008	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-07	1.56E-06	3.56E-07	2.082163	0.020
650508.61	4182103.03	0.048	0.052	0.008	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-07	1.58E-06	3.66E-07	2.107107	0.020
650528.61	4182103.03	0.057	0.045	0.009	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.62E-07	1.60E-06	3.92E-07	2.150506	0.021
650468.61	4182123.03	0.036	0.057	0.007	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-07	1.50E-06	3.21E-07	1.983948	0.019
650488.61	4182123.03	0.041	0.049	0.008	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-07	1.51E-06	3.26E-07	1.999478	0.018
650508.61	4182123.03	0.048	0.043	0.008	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-07	1.53E-06	3.43E-07	2.029537	0.018
650528.61	4182123.03	0.056	0.039	0.008	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-07	1.54E-06	3.69E-07	2.068288	0.019
650448.61	4182143.03	0.031	0.051	0.007	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-07	1.45E-06	2.83E-07	1.892982	0.016
650468.61	4182143.03	0.035	0.045	0.007	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-07	1.46E-06	2.88E-07	1.903254	0.016
650488.61	4182143.03	0.040	0.041	0.007	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	1.47E-06	2.99E-07	1.924968	0.016
650508.61	4182143.03	0.047	0.037	0.008	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-07	1.48E-06	3.19E-07	1.953171	0.017
650428.61	4182163.03	0.027	0.045	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	1.41E-06	2.47E-07	1.810094	0.014
650448.61	4182163.03	0.030	0.041	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	1.41E-06	2.51E-07	1.816738	0.014
650468.61	4182163.03	0.034	0.037	0.007	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-07	1.42E-06	2.60E-07	1.832879	0.014
650488.61	4182163.03	0.039	0.034	0.007	0.000	0.001	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-07	1.43E-06	2.75E-07	1.853331	0.015
650388.61	4182183.03	0.021	0.042	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.55E-07	1.36E-06	2.14E-07	1.73182	0.013
650408.61	4182183.03	0.023	0.039	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	1.37E-06	2.15E-07	1.73744	0.012
650428.61	4182183.03	0.026	0.036	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-07	1.37E-06	2.19E-07	1.740481	0.012
650448.61	4182183.03	0.029	0.033	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.50E-07	1.38E-06	2.26E-07	1.752509	0.012
650468.61	4182183.03	0.033	0.031	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.50E-07	1.38E-06	2.37E-07	1.77051	0.013
650208.61	4182203.03	0.010	0.048	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.65E-07	1.34E-06	1.77E-07	1.677488	0.012
650228.61	4182203.03	0.011	0.047	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-07	1.33E-06	1.79E-07	1.673271	0.012
650248.61	4182203.03	0.012	0.047	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-07	1.33E-06	1.81E-07	1.670325	0.012
650268.61	4182203.03	0.013	0.046	0.004	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-07	1.33E-06	1.83E-07	1.668458	0.012
650288.61	4182203.03	0.014	0.045	0.004	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-07	1.32E-06	1.85E-07	1.658927	0.012
650308.61	4182203.03	0.015	0.043	0.005	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	1.32E-06	1.85E-07	1.658869	0.012
650328.61	4182203.03	0.016	0.041	0.005	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	1.32E-06	1.86E-07	1.659327	0.011
650348.61	4182203.03	0.017	0.039	0.005	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-07	1.32E-06	1.86E-07	1.660613	0.011
650368.61	4182203.03	0.019	0.036	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-07	1.33E-06	1.86E-07	1.663191	0.011
650388.61	4182203.03	0.021	0.034	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-07	1.33E-06	1.88E-07	1.667424	0.011
650408.61	4182203.03	0.023	0.031	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-07	1.33E-06	1.92E-07	1.674162	0.011
650428.61	4182203.03	0.025	0.030	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-07	1.34E-06	1.98E-07	1.688418	0.011
650448.61	4182203.03	0.027	0.028	0.006	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-07	1.34E-06	2.05E-07	1.691142	0.011
649868.61	4182223.03	0.004	0.025	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.17E-07	1.60E-06	8.78E-08	1.903278	0.006
649888.61	4182223.03	0.004	0.026	0.003	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.15E-07	1.59E-06	9.33E-08	1.89985	0.006
649908.61	4182223.03	0.005	0.028	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.56E-06	9.80E-08	1.868729	0.007
649928.61	4182223.03	0.005	0.029	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.51E-06	1.03E-07	1.817023	0.007
649948.61	4182223.03	0.005	0.031	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.49E-06	1.07E-07	1.791729	0.007
649968.61	4182223.03	0.005	0.032	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.46E-06	1.12E-07	1.769364	0.007
649988.61	4182223.03	0.006	0.033	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	1.44E-06	1.16E-07	1.748691	0.008
650008.61	4182223.03	0.006	0.034	0.003	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-07	1.42E-06	1.20E-07	1.73011	0.008
650028.61	4182223.03	0.006	0.035	0.003	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-07	1.41E-06	1.24E-07	1.7129	0.008
650048.61	4182223.03	0.006	0.036	0.003	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-07	1.39E-06	1.27E-07	1.69651	0.008
650068.61	4182223.03	0.007	0.037	0.003	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-07	1.39E-06	1.31E-07	1.696372	0.009
650088.61	4182223.03	0.007	0.037	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.74E-07	1.36E-06	1.34E-07	1.668059	0.009
650108.61	4182223.03	0.008	0.038	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-07	1.36E-06	1.37E-07	1.669311	0.009
650128.61	4182223.03	0.008	0.038	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.70E-07	1.35E-06	1.40E-07	1.65797	0.009
650148.61	4182223.03	0.008	0.038	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-07	1.34E-06	1.43E-07	1.64808	0.009
650168.61	4182223.03	0.009	0.038	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-07	1.33E-06	1.45E-07	1.639558	0.009
650188.61	4182223.03	0.009	0.038	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-07	1.32E-06	1.48E-07	1.632473	0.010
650208.61	4182223.03	0.010	0.038	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-07	1.31E-06	1.50E-07	1.616022	0.010
650228.61	4182223.03	0.011	0.038	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-07	1.30E-06	1.53E-07	1.612089	0.010
650248.61	4182223.03	0.012	0.037	0.004	0.000	0.001	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-07	1.30E-06	1.55E-07	1.609263	0.010
650268.61	4182223.03	0.012	0.037	0.004	0.000	0.001	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	1.29E-06	1.57E-07	1.607394	0.010
650288.61	4182223.03	0.013	0.036	0.004	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	1.29E-06	1.59E-07	1.606518	0.010
650308.61	4182223.03	0.014	0.034	0.004	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.53E-07	1.29E-06	1.61E-07	1.60658	0.010
650328.61	4182223.03	0.015	0.033	0.005	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-07	1.29E-06	1.62E-07	1.607391	0.010
650348.61	4182223.03	0.017	0.031	0.005	0.000	0.001	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-07	1.30E-06	1.64E-07	1.617025	0.010
650368.61	4182223.03	0.018	0.030	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.50E-07	1.30E-06	1.66E-07	1.619435	0.010
650388.61	4182223.03	0.020	0.028	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.48E-07	1.31E-06	1.69E-07	1.622468	0.010
650408.61	4182223.03	0.021	0.027	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-07	1.30E-06	1.73E-07	1.623163	0.010
649868.61	4182243.03	0.004	0.021	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.62E-06	7.90E-08	1.915699	0.005
649888.61	4182243.03	0.004	0.023	0.003	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.58E-06	8.31E-08	1.881653	0.005
649908.61	4182243.03	0.005	0.024	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.09E-07	1.55E-06	8.68E-08	1.847649	0.006
649928.61	4182243.03	0.005	0.025	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.50E-06	9.00E-08	1.789732	0.006
649948.61	4182243.03	0.005	0.026	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-07	1.47E-06	9.36E-08	1.762815	0.006
649968.61	4182243.03	0.005	0.026	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-07	1.45E-06	9.70E-08	1.738091	0.006
649988.61	4182243.03	0.006	0.027	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-07	1.43E-06	1.00E-07	1.71522	0.007
650008.61	4182243.03	0.006	0.028	0.003	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-07	1.41E-06	1.04E-07	1.695024	0.007
650028.61	4182243.03	0.006	0.029	0.003	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-07	1.39E-06	1.07E-07	1.675701	0.007
650048.61	4182243.03	0.006	0.029	0.003	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.77E-07	1.37E-06	1.10E-07	1.658465	0.007
650068.61	4182243.03	0.007	0.030	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-07	1.37E-06	1.13E-07	1.657832	0.007
650088.61	4182243.03	0.007	0.030	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-07	1.35E-06	1.16E-07	1.642786	0.007
650108.61	4182243.03	0.007	0.031	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-07	1.34E-06	1.19E-07	1.62948	0.008
650128.61	4182243.03	0.008	0.031	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-07	1.33E-06	1.21E-07	1.61765	0.008
650148.61	4182243.03	0.008	0.031	0.003	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-07	1.32E-06	1.24E-07	1.607298	0.008
650168.61	4182243.03	0.009	0.032	0.003	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-07	1.31E-06	1.27E-07	1.598276	0.008
650188.61	4182243.03	0.009	0.032	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-07	1.30E-06	1.30E-07	1.590563	0.008

650208.61	4182243.03	0.010	0.032	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-07	1.29E-06	1.32E-07	1.584177	0.008
650228.61	4182243.03	0.010	0.032	0.004	0.000	0.001	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.57E-07	1.29E-06	1.35E-07	1.579016	0.008
650248.61	4182243.03	0.011	0.031	0.004	0.000	0.001	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	1.28E-06	1.37E-07	1.574899	0.008
650268.61	4182243.03	0.012	0.031	0.004	0.000	0.001	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.54E-07	1.28E-06	1.39E-07	1.57136	0.009
650288.61	4182243.03	0.013	0.030	0.004	0.000	0.001	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.52E-07	1.28E-06	1.41E-07	1.569003	0.009
650308.61	4182243.03	0.014	0.029	0.004	0.000	0.001	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.51E-07	1.27E-06	1.43E-07	1.567257	0.009
650328.61	4182243.03	0.015	0.028	0.004	0.000	0.001	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49E-07	1.27E-06	1.45E-07	1.56606	0.008
650348.61	4182243.03	0.016	0.026	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.47E-07	1.27E-06	1.46E-07	1.564792	0.008
650368.61	4182243.03	0.017	0.025	0.005	0.000	0.001	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.46E-07	1.27E-06	1.49E-07	1.564397	0.008
649828.61	4182263.03	0.004	0.017	0.002	0.000	0.000	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27E-07	1.65E-06	6.46E-08	1.945519	0.004
649848.61	4182263.03	0.004	0.018	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.62E-06	6.82E-08	1.909047	0.004
649868.61	4182263.03	0.004	0.019	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.19E-07	1.61E-06	7.17E-08	1.90043	0.005
649888.61	4182263.03	0.004	0.020	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.57E-06	7.49E-08	1.862541	0.005
649908.61	4182263.03	0.005	0.020	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.54E-06	7.80E-08	1.827097	0.005
649928.61	4182263.03	0.005	0.021	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.49E-06	8.07E-08	1.768843	0.005
649948.61	4182263.03	0.005	0.022	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.48E-06	8.39E-08	1.763327	0.005
649968.61	4182263.03	0.005	0.023	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.46E-06	8.73E-08	1.738967	0.006
649988.61	4182263.03	0.005	0.024	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.43E-06	9.00E-08	1.712575	0.006
650008.61	4182263.03	0.006	0.024	0.003	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-07	1.41E-06	9.26E-08	1.687736	0.006
650028.61	4182263.03	0.006	0.025	0.003	0.000	0.001	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.81E-07	1.39E-06	9.51E-08	1.664847	0.006
650048.61	4182263.03	0.006	0.025	0.003	0.000	0.001	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.78E-07	1.37E-06	9.76E-08	1.644065	0.006
650068.61	4182263.03	0.007	0.025	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.74E-07	1.35E-06	1.00E-07	1.625267	0.006
650088.61	4182263.03	0.007	0.026	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-07	1.33E-06	1.03E-07	1.6084	0.007
650108.61	4182263.03	0.007	0.026	0.003	0.000	0.001	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-07	1.32E-06	1.05E-07	1.593319	0.007
649828.61	4182283.03	0.004	0.015	0.002	0.000	0.000	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.25E-07	1.64E-06	5.98E-08	1.929252	0.004
649848.61	4182283.03	0.004	0.016	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.62E-06	6.30E-08	1.898664	0.004
649868.61	4182283.03	0.004	0.017	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.60E-06	6.60E-08	1.888496	0.004
649888.61	4182283.03	0.004	0.017	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.57E-06	6.86E-08	1.847776	0.004
649908.61	4182283.03	0.005	0.018	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.53E-06	7.12E-08	1.809856	0.005
649928.61	4182283.03	0.005	0.019	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.50E-06	7.36E-08	1.774147	0.005
649948.61	4182283.03	0.005	0.019	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.47E-06	7.65E-08	1.746155	0.005
649968.61	4182283.03	0.005	0.020	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-07	1.45E-06	7.83E-08	1.715204	0.005
649828.61	4182303.03	0.004	0.013	0.002	0.000	0.000	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.23E-07	1.63E-06	5.42E-08	1.904068	0.003
649848.61	4182303.03	0.004	0.014	0.002	0.000	0.000	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.61E-06	5.89E-08	1.893357	0.004
649868.61	4182303.03	0.004	0.015	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.58E-06	6.12E-08	1.850706	0.004
649888.61	4182303.03	0.004	0.015	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.54E-06	6.35E-08	1.809927	0.004
649908.61	4182303.03	0.005	0.016	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.50E-06	6.57E-08	1.77021	0.004
649928.61	4182303.03	0.005	0.016	0.003	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.49E-06	6.78E-08	1.755641	0.004
649948.61	4182303.03	0.005	0.017	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.46E-06	7.02E-08	1.725361	0.004
649968.61	4182303.03	0.005	0.017	0.003	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	1.43E-06	7.18E-08	1.69279	0.004
649848.61	4182323.03	0.004	0.013	0.002	0.000	0.000	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.21E-07	1.61E-06	5.54E-08	1.890139	0.003
649868.61	4182323.03	0.004	0.013	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.14E-07	1.57E-06	5.73E-08	1.840788	0.004
649888.61	4182323.03	0.004	0.014	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.55E-06	5.94E-08	1.822439	0.004
649908.61	4182323.03	0.005	0.014	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.51E-06	6.12E-08	1.778347	0.004
649928.61	4182323.03	0.005	0.015	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.46E-06	6.30E-08	1.715438	0.004
649948.61	4182323.03	0.005	0.015	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.45E-06	6.51E-08	1.704986	0.004
649848.61	4182343.03	0.004	0.012	0.002	0.000	0.000	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.20E-07	1.60E-06	5.22E-08	1.876538	0.003
649868.61	4182343.03	0.004	0.012	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.13E-07	1.57E-06	5.41E-08	1.832498	0.003
649888.61	4182343.03	0.004	0.013	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.52E-06	5.58E-08	1.784994	0.003
649908.61	4182343.03	0.005	0.013	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.50E-06	5.74E-08	1.762742	0.003
649928.61	4182343.03	0.005	0.013	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.44E-06	5.90E-08	1.697084	0.004
649948.61	4182343.03	0.005	0.014	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-07	1.43E-06	6.08E-08	1.683077	0.004
649848.61	4182363.03	0.004	0.011	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.18E-07	1.59E-06	4.90E-08	1.855454	0.003
649868.61	4182363.03	0.004	0.011	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.56E-06	5.12E-08	1.820049	0.003
649888.61	4182363.03	0.004	0.011	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.51E-06	5.27E-08	1.771216	0.003
649908.61	4182363.03	0.004	0.012	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.01E-07	1.49E-06	5.42E-08	1.746557	0.003
649928.61	4182363.03	0.005	0.012	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.92E-07	1.43E-06	5.56E-08	1.678599	0.003
649948.61	4182363.03	0.005	0.012	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.41E-06	5.71E-08	1.660276	0.003
649868.61	4182383.03	0.004	0.010	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12E-07	1.55E-06	4.87E-08	1.812416	0.003
649888.61	4182383.03	0.004	0.010	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.50E-06	5.00E-08	1.755478	0.003
649908.61	4182383.03	0.004	0.011	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.96E-07	1.46E-06	5.13E-08	1.704973	0.003
649928.61	4182383.03	0.005	0.011	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.44E-06	5.27E-08	1.681326	0.003
649948.61	4182383.03	0.005	0.011	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-07	1.40E-06	5.40E-08	1.638512	0.003
649968.61	4182383.03	0.005	0.011	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.82E-07	1.37E-06	5.53E-08	1.604973	0.003
649868.61	4182403.03	0.004	0.009	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10E-07	1.54E-06	4.64E-08	1.797187	0.003
649888.61	4182403.03	0.004	0.010	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.02E-07	1.49E-06	4.76E-08	1.737547	0.003
649908.61	4182403.03	0.004	0.010	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.98E-07	1.46E-06	4.89E-08	1.709675	0.003
649928.61	4182403.03	0.005	0.010	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-07	1.42E-06	5.00E-08	1.66025	0.003
649948.61	4182403.03	0.005	0.010	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-07	1.38E-06	5.12E-08	1.616039	0.003
649968.61	4182403.03	0.005	0.010	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-07	1.35E-06	5.25E-08	1.580274	0.003
649868.61	4182423.03	0.004	0.009	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.08E-07	1.53E-06	4.43E-08	1.777563	0.003
649888.61	4182423.03	0.004	0.009	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00E-07	1.47E-06	4.55E-08	1.7184	0.003
649908.61	4182423.03	0.004	0.009	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.95E-07	1.45E-06	4.66E-08	1.688489	0.003
649928.61	4182423.03	0.005	0.009	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.88E-07	1.40E-06	4.77E-08	1.637615	0.003
649948.61	4182423.03	0.005	0.009	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.82E-07	1.36E-06	4.87E-08	1.592037	0.003
649968.61	4182423.03	0.005	0.010	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-07	1.33E-06	4.99E-08	1.553905	0.003
649868.61	4182443.03	0.004	0.008	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.06E-07	1.51E-06	4.25E-08	1.755921	0.003
649888.61	4182443.03	0.004	0.008	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.97E-07	1.45E-06	4.35E-08	1.695265	0.003
649908.61	4182443.03	0.004	0.008	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.93E-07	1.43E-06	4.45E-08	1.664042	0.003
649928.61	4182443.03	0.004	0.009	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-07	1.38E-06	4.55E-08	1.612194	0.003
649948.61	4182443.03	0.005	0.009	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.76E-07	1.32E-06	4.64E-08	1.545539	0.003
649968.61	4182443.03	0.005	0.009	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-07	1.31E-06	4.75E-08	1.526558	0.003
649868.61	4182463.03	0.004	0.008	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.03E-07	1.49E-06	4.08E-08	1.734259	0.003
649888.61	4182463.03	0.004	0.008	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.94E-07	1.43E-06	4.17E-08	1.668054	0.003
649908.61	4182463.03	0.004	0.008	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-07	1.38E-06	4.26E-08	1.61197	0.003
649928.61	4182463.03	0.004	0.008	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-07	1.34E-06	4.35E-08	1.561728	0.003
649948.61	4182463.03	0.004	0.008	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.73E-07	1.30E-06	4.44E-08	1.516837	0.003
649968.61	4182463.03	0.005	0.008	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-07	1.27E-06	4.53E-08	1.47894	0.003
649868.61	4182483.03	0.004	0.007	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.04E-07	1.49E-06	3.92E-08	1.734767	0.003
649888.61	4182483.03	0.004	0.007	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.91E-07	1.41E-06	4.00E-08	1.638338	0.003
649908.61	4182483.03	0.004	0.007	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.82E-07	1.36E-06	4.08E-08	1.581325	0.003
649928.61	4182483.03	0.004	0.007	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.75E-07	1.31E-06	4.16E-08	1.531533	0.003
649948.61	4182483.03	0.004	0.008	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.69E-07	1.28E-06	4.24E-08	1.488075	0.003
649968.61	4182483.03	0.005	0.008	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-07	1.26E-06	4.33E-08	1.469837	0.002
649848.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.49E-06	3.68E-08	1.735865	0.003
649868.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.46E-06	3.77E-08	1.699346	0.003
649888.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	1.40E-06	3.84E-08	1.63163	0.003
649908.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-07	1.33E-06	3.91E-08	1.548489	0.003
649928.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.71E-07	1.29E-06	3.99E-08	1.499096	0.003
649948.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.68E-07	1.27E-06	4.07E-08	1.47835	0.003
649968.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.009	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.63E-07	1.24E-06	4.14E-08	1.440092	0.002

649988.61	4182503.03	0.004	0.007	0.002	0.000	0.000	0.009	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.58E-07	1.21E-06	4.20E-08	1.409182	0.002
649848.61	4182523.03	0.004	0.006	0.002	0.000	0.000	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.05E-07	1.50E-06	3.55E-08	1.736605	0.003
649868.61	4182523.03	0.004	0.006	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.90E-07	1.40E-06	3.62E-08	1.628218	0.003
649888.61	4182523.03	0.004	0.006	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-07	1.37E-06	3.69E-08	1.593453	0.003
649908.61	4182523.03	0.004	0.006	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.74E-07	1.30E-06	3.76E-08	1.511742	0.003
649928.61	4182523.03	0.004	0.007	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-07	1.26E-06	3.83E-08	1.464645	0.002
649948.61	4182523.03	0.004	0.007	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.64E-07	1.24E-06	3.90E-08	1.444785	0.002
649968.61	4182523.03	0.004	0.007	0.002	0.000	0.000	0.009	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.59E-07	1.21E-06	3.97E-08	1.409475	0.002
649828.61	4182543.03	0.003	0.006	0.002	0.000	0.000	0.013	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.11E-07	1.53E-06	3.36E-08	1.774086	0.003
649848.61	4182543.03	0.004	0.006	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.99E-07	1.45E-06	3.43E-08	1.686895	0.003
649868.61	4182543.03	0.004	0.006	0.002	0.000	0.000	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.89E-07	1.39E-06	3.49E-08	1.61306	0.003
649888.61	4182543.03	0.004	0.006	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.80E-07	1.33E-06	3.55E-08	1.550264	0.003
649908.61	4182543.03	0.004	0.006	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.72E-07	1.29E-06	3.62E-08	1.496239	0.003
649928.61	4182543.03	0.004	0.006	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.66E-07	1.25E-06	3.68E-08	1.44981	0.002
649948.61	4182543.03	0.004	0.006	0.002	0.000	0.000	0.009	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.60E-07	1.21E-06	3.75E-08	1.410818	0.002
649888.61	4182563.03	0.004	0.006	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.70E-07	1.27E-06	3.42E-08	1.476522	0.003
649908.61	4182563.03	0.004	0.006	0.002	0.000	0.000	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.67E-07	1.25E-06	3.48E-08	1.45322	0.002
649928.61	4182563.03	0.004	0.006	0.002	0.000	0.000	0.009	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.61E-07	1.21E-06	3.54E-08	1.410843	0.002
649948.61	4182563.03	0.004	0.006	0.002	0.000	0.000	0.009	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.56E-07	1.19E-06	3.59E-08	1.376851	0.002
649748.61	4182643.03	0.003	0.004	0.002	0.000	0.000	0.010	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.70E-07	1.25E-06	2.57E-08	1.447314	0.003
649864.97	4182563.55	0.004	0.006	0.002	0.000	0.000	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.79E-07	1.33E-06	3.34E-08	1.54132	0.003
649848.56	4182565.38	0.003	0.006	0.002	0.000	0.000	0.011	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-07	1.37E-06	3.29E-08	1.589392	0.003
648281.36	4184789.59	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-08	1.70E-07	3.61E-09	0.19239	0.000
648281.36	4184809.59	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.83E-08	1.69E-07	3.59E-09	0.190823	0.000
655583.55	4180801.9	0.000	0.000	0.001	0.044	0.072	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	2.29E-08	9.45E-06	1.35E-07	9.609375	0.015
655603.55	4180801.9	0.000	0.000	0.001	0.042	0.068	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.27E-08	8.86E-06	1.27E-07	9.014146	0.014
655623.55	4180801.9	0.000	0.000	0.001	0.040	0.065	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.26E-08	8.46E-06	1.21E-07	8.60195	0.013
655583.55	4180821.9	0.000	0.000	0.001	0.036	0.058	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	2.28E-08	7.79E-06	1.11E-07	7.923744	0.012
655603.55	4180821.9	0.000	0.000	0.001	0.033	0.053	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.27E-08	7.03E-06	1.00E-07	7.149569	0.011
655623.55	4180821.9	0.000	0.000	0.001	0.031	0.049	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.25E-08	6.49E-06	9.28E-08	6.604308	0.010
655583.55	4180841.9	0.000	0.000	0.001	0.033	0.053	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	2.28E-08	7.14E-06	1.02E-07	7.26315	0.011
655603.55	4180841.9	0.000	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.27E-08	6.23E-06	8.90E-08	6.340968	0.010
655623.55	4180841.9	0.000	0.000	0.001	0.026	0.042	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.25E-08	5.60E-06	8.01E-08	5.701045	0.009
655643.55	4180841.9	0.000	0.000	0.001	0.024	0.039	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.24E-08	5.15E-06	7.38E-08	5.249131	0.008
655663.55	4180841.9	0.000	0.000	0.001	0.023	0.036	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-08	4.83E-06	6.92E-08	4.921154	0.007
655583.55	4180861.9	0.000	0.000	0.001	0.031	0.050	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	2.28E-08	6.75E-06	9.62E-08	6.869022	0.010
655603.55	4180861.9	0.000	0.000	0.001	0.027	0.043	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.26E-08	5.73E-06	8.18E-08	5.831184	0.009
655623.55	4180861.9	0.000	0.000	0.001	0.023	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.25E-08	5.04E-06	7.21E-08	5.137445	0.008
655643.55	4180861.9	0.000	0.000	0.001	0.021	0.034	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.23E-08	4.57E-06	6.54E-08	4.65628	0.007
655663.55	4180861.9	0.000	0.000	0.001	0.020	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-08	4.23E-06	6.06E-08	4.311587	0.006
655583.55	4180881.9	0.000	0.000	0.001	0.029	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	2.27E-08	6.36E-06	9.06E-08	6.471652	0.010
655603.55	4180881.9	0.000	0.000	0.001	0.024	0.039	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.26E-08	5.28E-06	7.54E-08	5.380203	0.008
655623.55	4180881.9	0.000	0.000	0.001	0.021	0.034	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.24E-08	4.59E-06	6.57E-08	4.681791	0.007
655643.55	4180881.9	0.000	0.000	0.001	0.019	0.031	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.23E-08	4.13E-06	5.91E-08	4.207923	0.006
655663.55	4180881.9	0.000	0.000	0.001	0.017	0.028	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.22E-08	3.79E-06	5.44E-08	3.870399	0.006
656281.39	4180822.75	0.000	0.000	0.001	0.018	0.029	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.85E-08	3.79E-06	5.45E-08	3.859887	0.006
656298.45	4180812.4	0.000	0.000	0.001	0.021	0.033	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	4.31E-06	6.20E-08	4.39478	0.007
656210.13	4181007.91	0.000	0.000	0.001	0.004	0.007	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.86E-08	1.04E-06	1.53E-08	1.075574	0.001
656225.97	4181073.08	0.000	0.000	0.001	0.003	0.006	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84E-08	8.57E-07	1.27E-08	0.888155	0.001
656180.29	4181060.9	0.000	0.000	0.001	0.004	0.006	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.87E-08	9.33E-07	1.38E-08	0.965816	0.001

Appendix C

2023 Biological Resource Assessment

MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION PROJECT

Resource Assessment

Prepared for
San Joaquin Area Flood Control Agency

February 2023



MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION PROJECT

Resource Assessment

Prepared for
San Joaquin Area Flood Control Agency

February 2023

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CHAPTER 1
Introduction

The San Joaquin Area Flood Control Agency (SJAFCA) is assessing the 22,400-acre Mossdale Tract area that was identified as being at risk of flooding from a 200-year flood event. The Mossdale Tract area includes Reclamation District (RD) 17 (16,110 acres), portions the cities of Stockton, Lathrop, Manteca, and unincorporated San Joaquin County (see **Figure 1-1**). The Mossdale Tract Area Urban Flood Risk Reduction (UFRR) Project (proposed project) would include the construction and operation of flood risk reduction and multi-benefit components in and adjacent to the Mossdale Tract area.

This report provides the methods and results of a resource assessment for the Mossdale Tract area (study area). The purpose of the resource assessment is to support the development of flood risk reduction components for the proposed project for construction, operations, and maintenance activities. This report covers fisheries and aquatic habitat, vegetation, special status plants and wildlife, including the federally listed threatened valley elderberry longhorn beetle (VELB) habitat (elderberries). The data collected for this analysis is contained in geographic information system (GIS) database files that will be provided separately to SJAFCA.

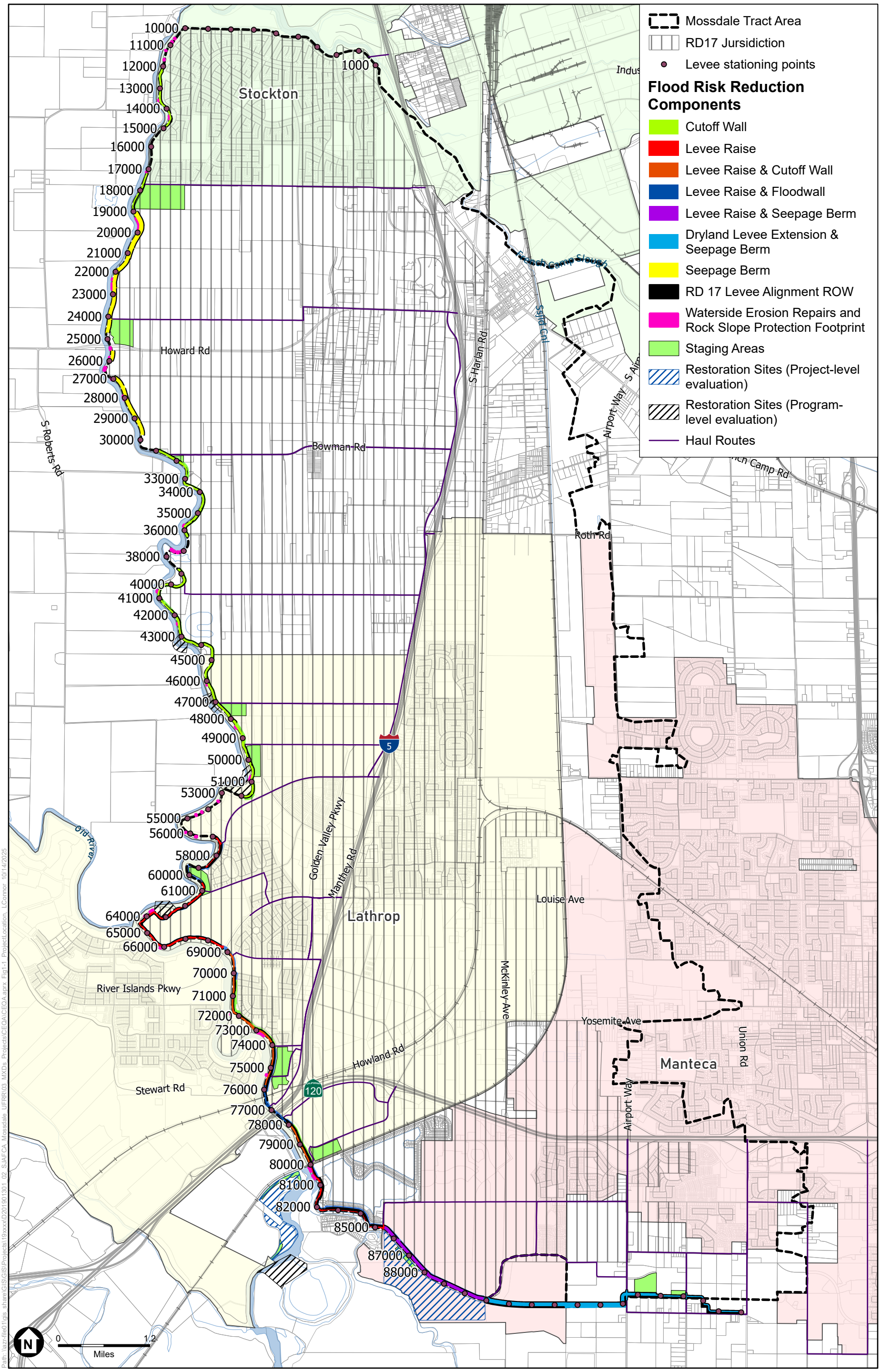
The study area comprises approximately 920 acres, mostly on a levee along the San Joaquin River between Stockton and Lathrop, in San Joaquin County, California. The study area includes smaller segments of levee along French Camp Slough and Weatherbee Lake. The study area also includes several potential staging areas. There was no available access to privately owned areas of the "dryland levee" portion of the study area. Therefore, the dryland levee area was surveyed at public access points only. Almost all of the dryland levee area consists of agricultural land use. See **Table 1-1** and Figure 1-1 for a summary of study area access and survey methodology.

Elevation ranges from approximately 5 to 35 feet. The majority of the study area is within the San Joaquin Delta Watershed (hydrologic unit code 18040003); a small part of the study area on the water-side of the levee along French Camp Slough is in the lowest portion of the Rock Creek-French Camp Slough Watershed (18040051). Almost all of the study area is in the primary or secondary zone of the Delta. The study area is not in critical habitat for any federally listed plant (USFWS 2022c).

Land use within and surrounding the study area is primarily agricultural or urban development. Relatively small areas of natural habitat occur throughout the study area, mostly on the water side of the levees. The overall level of disturbance is high since almost all of the study area follows existing levees, and the segment that does not is in an area of intensive agriculture. **Appendix A** is a soil resources report for the study area and nearby areas.

TABLE 1-1
STUDY AREA SURVEY METHODOLOGY AND ADDITIONAL SURVEYS REQUIRED

Study Area	Survey Methodology	Additional Surveys Required
Waterside Existing Levee from Station 0 to 10,000	Surveyed by driving and walking the levee.	None
Waterside Existing Levee from Station 10,000 to 82,000	Surveyed by boat and driving and walking the levee.	None
Landside Existing Levee and Levee from Station 0 to 92,000	Surveyed by driving and walking the levee.	None
Dryland Levee Extension from Station 92,000 to 103,000	Surveyed from public access points, by review of aerial photos and available public and subscription-based data.	Currently no access, field surveys required in future.
Staging Areas 3, 4, 6 ,9, and 13	Surveyed by walking the staging areas.	None
Staging Areas 1, 2, 7, 8, 10, 11, 12	Not surveyed	Currently no access, field surveys required in future.
Restoration Sites	Not surveyed	Currently no access, field surveys required in future.



SOURCE: Esri, 2024; CPAD, 2022; KSN, 2024; PBI, 2024; ESA, 2024

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 1-1
Project Area with Components

ESA

CHAPTER 2

Fisheries Resources Assessment – Shaded Riverine Aquatic (SRA) Cover

2.1 Purpose

The lower San Joaquin River serves as a migration corridor and/or provides other types of habitat (e.g., rearing, spawning) for Central Valley fall-/late fall-run Chinook salmon evolutionary significant unit (ESU) (*Oncorhynchus tshawytscha*), Central Valley spring-run Chinook salmon ESU (*O. tshawytscha*), Sacramento River winter-run Chinook salmon ESU (*O. tshawytscha*), Central Valley steelhead distinct population segment (DPS) (*Oncorhynchus mykiss*), Delta smelt (*Hypomesus transpacificus*), Sacramento splittail (*Pogonichthys macrolepidotus*), and North American green sturgeon southern DPS (*Acipenser medirostris*). This chapter documents the suitability of the study area to support these special-status fisheries resources, and the results of a reconnaissance-level survey for aquatic habitat that supports special-status fisheries.

2.2 Methods

Shaded riverine aquatic (SRA) cover is the near-bank cover at the interface of the river and adjacent habitat that benefits fish species, including (a) the adjacent bank being composed of natural, eroding substrates, (b) supporting riparian vegetation that either hangs over the water or protrudes into the water providing nearshore shade, and (c) the water containing variable amounts of woody debris (e.g., leaves, logs, branches, and roots). SRA cover was characterized using three variables: (1) vegetation properties, (2) bank properties, and (3) structure.

SRA cover field surveys were conducted on June 6th, June 7th, and June 15th, 2022, using the ESRI Field Maps version 22.3.1 mobile application on an iPad and using the Field Maps geolocation technology to track the surveyor's location in the field. Field surveys used a customized Field Maps map with the capability for hand drawing attribute features, such as large woody debris and aquatic vegetation, over aerial imagery in the field. Approximately 13 miles of aquatic habitat was surveyed along the western edge of the study area along the San Joaquin River. A total of 11 substrate sample points and 12 SRA polylines along the San Joaquin River were recorded in the study area.

2.2.1 Vegetation properties

Vegetation properties recorded for each SRA polyline were the percentage of tree cover, shrub cover, and herbaceous cover.

2.2.2 Bank properties

Bank properties were characterized by selecting the dominant bank shape and the dominant sediment type for the shoreline section. Dominant bank shape was selected from three options – undercut, smooth slope, or (a vertical) step. Step heights were not measured. Dominant sediment type was selected from six options – clay, silt, sand, gravel, cobble, or riprap.

2.2.3 Organic Structure

At each segment of the survey the singular, predominant, organic structure feature was recorded. The choices for the predominant organic structure comprised of trunks, branches, and leaves. Instream structures were documented with gps segments and photos throughout the 13-mile survey reach when considered to provide potentially significant fish habitat. Observed structures included large woody debris such as downed trees, root wads, and partially submerged logs.

2.3 Results

Results of the SRA fisheries resources assessment are presented below in **Tables 2-1** through **2-3.** Throughout the 13-mile study area, tree cover was variable. In sections where tree cover was 0 percent, the existing habitat was characterized by shrubs dominating the plant cover (**Figure 2-1**) or by rip rap, completely devoid of trees or shrubs, with only weeds remaining providing minimal herbaceous cover (**Figure 2-2**).

Shrub cover was variable throughout the survey reach. When shrub cover as 0 percent, habitat was characterized by tree(s) dominating the plant cover (**Figure 2-3**) or by rip rap and completely devoid of trees or shrubs, with only weeds remaining as herbaceous cover.

Herbaceous cover ranged from 0 to 20 percent of the shoreline. In most cases, when SRA cover was present, trees and shrubs were the dominate SRA cover, with herbaceous cover occurring sporadically and in small percentages. Bank shape was dominated by undercut banks (**Figure 2-4**), followed by smooth slope or step. Substrate type was dominated by riprap, comprising approximately 43 percent of the surveyed area. Of the remaining surveyed area, sand, cobble, and silt accounted for approximately 20, 20, and 17 percent of the substrate type, respectively. Organic structure consisted of 84 percent branches, 9 percent leaves, and 7 percent tree trunks.

The surveyed area consisted of a mix of riparian and ruderal habitats. The riparian habitat is dominated by sandbar willow (*Salix exigua*) and valley oak (*Quercus lobata*) and the occasional Fremont's cottonwood (*Populus fremontii*), and Himalayan blackberry (*Rubus armeniacus*) as a vine layer and a ruderal herbaceous layer. Ruderal habitat within the survey site generally occurred along the edges of levees, primarily in the rip rap, and was sparsely vegetated with weedy plant species that are adapted to frequent human disturbances.



Figure 2-1
Representative photograph of Shrub-Dominated SRA Habitat



Figure 2-2
Representative Photograph of Bank with Rip Rap and No SRA Habitat



Figure 2-3
Representative Photograph of Tree-Dominated SRA Habitat



Figure 2-4
Representative Photograph of Shrub-Dominated SRA Habitat

TABLE 2-1
SRA VEGETATION PROPERTIES DATA SUMMARY

Segment	Average % Tree Cover	Average % Shrub Cover	Average % Herbaceous Cover
1	75	15	10
2	25	60	15
3	75	20	5
4	95	0	5
5	40	50	10
6	65	25	10
7	0	80	20
8	0	100	0
9	40	50	10
10	100	0	0
11	90	10	0
12	10	90	0

SOURCE: ESA 202

TABLE 2-2
SRA BANK PROPERTIES DATA SUMMARY

Segment	Bank Shape	Sediment Type
1	smooth slope	cobble
2	smooth slope	sand
3	step	rip rap
4	step	cobble
5	step	silt
6	undercut	rip rap
7	undercut	cobble
8	undercut	rip rap
9	smooth slope	sand
10	undercut	rip rap
11	undercut	silt
12	undercut	sand

SOURCE: ESA 2022

TABLE 2-3
SRA STRUCTURE PROPERTIES DATA SUMMARY FOR ENTIRE REACH

Segment	Organic Structure
1	branches
2	branches
3	trunks
4	branches
5	branches
6	branches
7	leaves
8	branches
9	branches
10	branches
11	branches
12	leaves

SOURCE: ESA 2022

2.4 Summary

Ultimately, the study area is a patchwork of riparian, ruderal, and open, disturbed habitat types. The best SRA cover is found in the areas that are dominated by riparian species like Fremont's cottonwood, valley oak, and sandbar willow that provide shade and help keep water temperatures cooler. The habitat quality in the riparian dominant areas is accentuated with the presence of large woody debris that provides structure and cover for fish.

The reconnaissance level surveys and available data indicate there is suitable habitat and the potential for state and federally listed fish species to occur within the study area. No special status fish species were observed during these surveys, however these surveys were designed to assess potential habitat, not detect individual fish.

CHAPTER 3
Biological Communities and Special-Status Plants

3.1 Purpose

This chapter documents existing conditions of biological communities, the suitability of the study area to support special-status botanical resources, and the results of a protocol survey for special-status plants.

3.2 Methods

Publicly available biological resource data were reviewed prior to fieldwork from the following data sources:

- Current and historical topographic maps (USGS 2022)
- Current and historical aerial imagery (Google, Inc. 2022)
- Soil maps and information from the National Resources Conservation Service (NRCS 2022)
- California Natural Diversity Database (CNDDB; CDFW 2022a)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2022)

ESA Biologist/Botanist Chuck Hughes conducted field surveys in 2022 on June 6, 7, 15, and 29, and September 1 and 29. ESA Biologist Aaron Lopez assisted on June 6, 7, and 15. ESA Biologist Zach Leisz assisted on June 29 and September 1.

Historic average precipitation for the Stockton Metropolitan Airport gauge from July 1 through June 30 is 13.45 inches (NWS 2022). From July 1, 2021, through June 30, 2022 the Stockton Metropolitan Airport gauge recorded 9.82 inches of precipitation. Precipitation in the winter and spring preceding the survey was approximately 73 percent of normal. Most of that precipitation came in late 2021. Only 1.6 inches was recorded from January through June 2022. The special status plants with the potential to occur in the study area are not directly dependent on wet-season precipitation. Instead, they generally occur along tidally influenced areas of waterways and wetlands or in or near emergent marshes. Therefore, their visible presence would not have been substantially reduced by the below-average amount of precipitation in 2022 prior to the survey.

The field survey followed the botanical survey guidelines of the U.S. Army Corps of Engineers (USACE 1996) and CDFW (2018). The 2022 fieldwork was conducted during the seasonally appropriate period. Most of the special-status plants with potential to occur in the study area only have habitat along the immediate margin of the San Joaquin River or other waterbodies, or in a few areas of emergent or forested wetland that occur in the study area. The margin of the San Joaquin River was surveyed from a slow-moving watercraft with outboard motor that could travel near the shoreline to allow good visibility of the vegetation. Binoculars were also used as needed. In areas of better habitat where some of the smaller special status species (Mason's lilaeopsis [*Lilaeopsis masonii*], Delta mudwort [*Limosella australis*]) were more likely to be present, the boat was brought to shore and the area was searched on foot. Much of the immediate margin of the San Joaquin River is covered with rock and provides poor or no habitat for these species. The remainder of the study area consists of areas of development, agriculture, or ruderal habitat. Developed areas were not surveyed and consist almost entirely of residential or commercial development or landscaped parks. Agricultural areas were also not surveyed, with the exception of ditches with earthen banks and enough moisture to support some of the special-status plants with the potential to occur. Ruderal areas consist mostly of the levee and some of the staging areas. Most of the levee, except low areas near the water, is kept largely free of vegetation through application of herbicide. Ruderal areas of the levee were surveyed from a vehicle, with occasional stops to search areas of better habitat on foot. Ruderal staging areas were walked on foot. There was no available access to private areas of the "dryland levee" portion of the study area. Therefore, the dryland levee area was surveyed at public access points only. Almost all of the dryland levee area was in consists of agricultural land cover.

Approximately 63 person-hours were spent in the field during the survey. An additional 2.5 person-hours were spent keying plants collected in the field. All vascular plants found in the study area were identified to the taxonomic level necessary to determine legal status. A list of plants observed in the study area is in **Appendix B**. Scientific nomenclature follows the Jepson Flora Project (Jepson 2022), based on Baldwin et al. (2012). Biological community boundaries were identified based on tide gauge data, field notes, and aerial photographs.

3.3 Results

"Special-status plants" is a collective term for plants identified by a variety of laws and regulations. The term "special-status plants" as evaluated in this report include:

- Plants listed (or candidate or proposed) under the federal Endangered Species Act (FESA) or California Endangered Species Act (CESA), or under the California Native Plant Protection Act (NPPA).
- Plants that are Rank 1 or 2 in the CNPS Inventory of Rare and Endangered Plants of California (CNPS 2022).

The potential for occurrence categories for special-status plants are defined as follows:

- A species is designated to have "no potential" to occur or "none" if (1) its specific habitat requirements (e.g., serpentine grasslands, as opposed to grasslands occurring on other soils)

are not present; **OR** (2) it is outside the range or presumed to be extirpated from the area or region.

- A species is designated as having a "low" potential for occurrence if (1) its known current distribution or range is outside of but near the study area; **OR** (2) only limited or marginally suitable habitat is present within the study area.
- A species is designated as having a "moderate" potential for occurrence if (1) there is habitat present within the study area or immediately adjacent areas; **AND** (2) the study area is within the known range of the species, even if the species was not observed during general biological surveys.
- A species is designated as having a "high" potential for occurrence if (1) there is habitat present within the study area or immediately adjacent areas; **AND** (2) the study area is within the known range of the species; **AND/OR** (3) there are records of the species on or near the site.
- A species is designated as "present" if it has been recently confirmed on the site.

Special-status biological communities are waters, wetlands, riparian communities, and any natural community ranked S1, S2, or S3 by CDFW (2022b). Waters and wetlands may be regulated under the federal Clean Water Act, the State Porter-Cologne Water Quality Control Act (Porter-Cologne Act), or both. Lakes and streams, including adjacent riparian areas and some ditches, may be regulated by CDFW under the California Fish and Game Code Lake or Streambed Alteration Program.

3.3.1 Biological Communities

Biological communities are assemblages of plant species that are defined by species composition and relative abundance. Other land uses, including developed areas and agriculture are also included in the list of biological communities below. **Table 3-1** and **Figure 3-1** identify the biological communities that occur in the study area.

TABLE 3-1
BIOLOGICAL COMMUNITIES

Natural Community	Acreage
Agriculture	308.62
Ruderal	285.78
Development	103.94
San Joaquin River	136.82
Riparian Forest	44.14
Forested Wetland	26.90
Weatherbee Lake	5.21
Emergent Wetland	4.80
French Camp Slough	3.59
Irrigation/Drainage Ditch	1.26
Total	**921.06**

3.3.1.1 San Joaquin River

The edge of the San Joaquin River in the study area is an estimate of the high tide line. The study area is in the legal Delta along a tidally influenced reach of the San Joaquin River. Trees on the water side of the levee, such as these native valley oaks, are mapped as riparian forest (**Figure 3-2**). In many locations the trees have been pruned 6-8 feet above the ground and lower vegetation is kept controlled. The high tide line is the limit of Clean Water Act Section 404 regulatory jurisdiction in tidal waters (except where adjacent wetlands are present). The high tide line includes high tides that occur with periodic frequency but does not include storm surges or high-water events (33 Code of Federal Regulations §328.3(d) [2014 annual edition]). An elevation of 7 feet (NAVD 1988) was estimated as the high tide line based on work done for project design, including a review of data from the Mossdale Bridge gauge in the San Joaquin River in the study area (DWR 2022). The maximum height of periodic tides, not influenced by wet season high-water events, are below 7 feet in elevation. The San Joaquin River is a waters of the U.S. and state, and is considered a sensitive natural community.



Figure 3-2
Typical View of the Bank of the San Joaquin River in the Study Area.



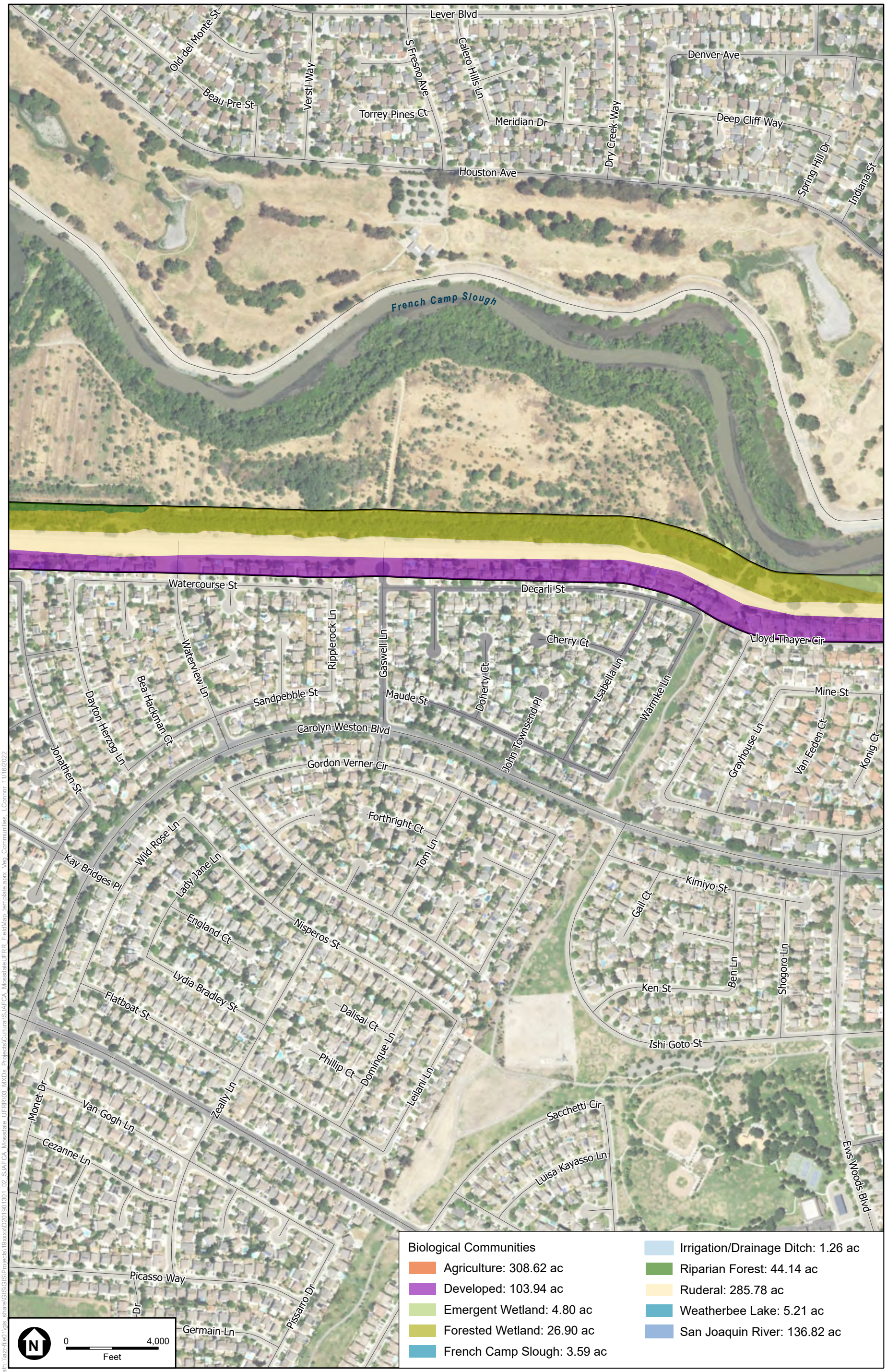
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 a
Biological Communities

ESA



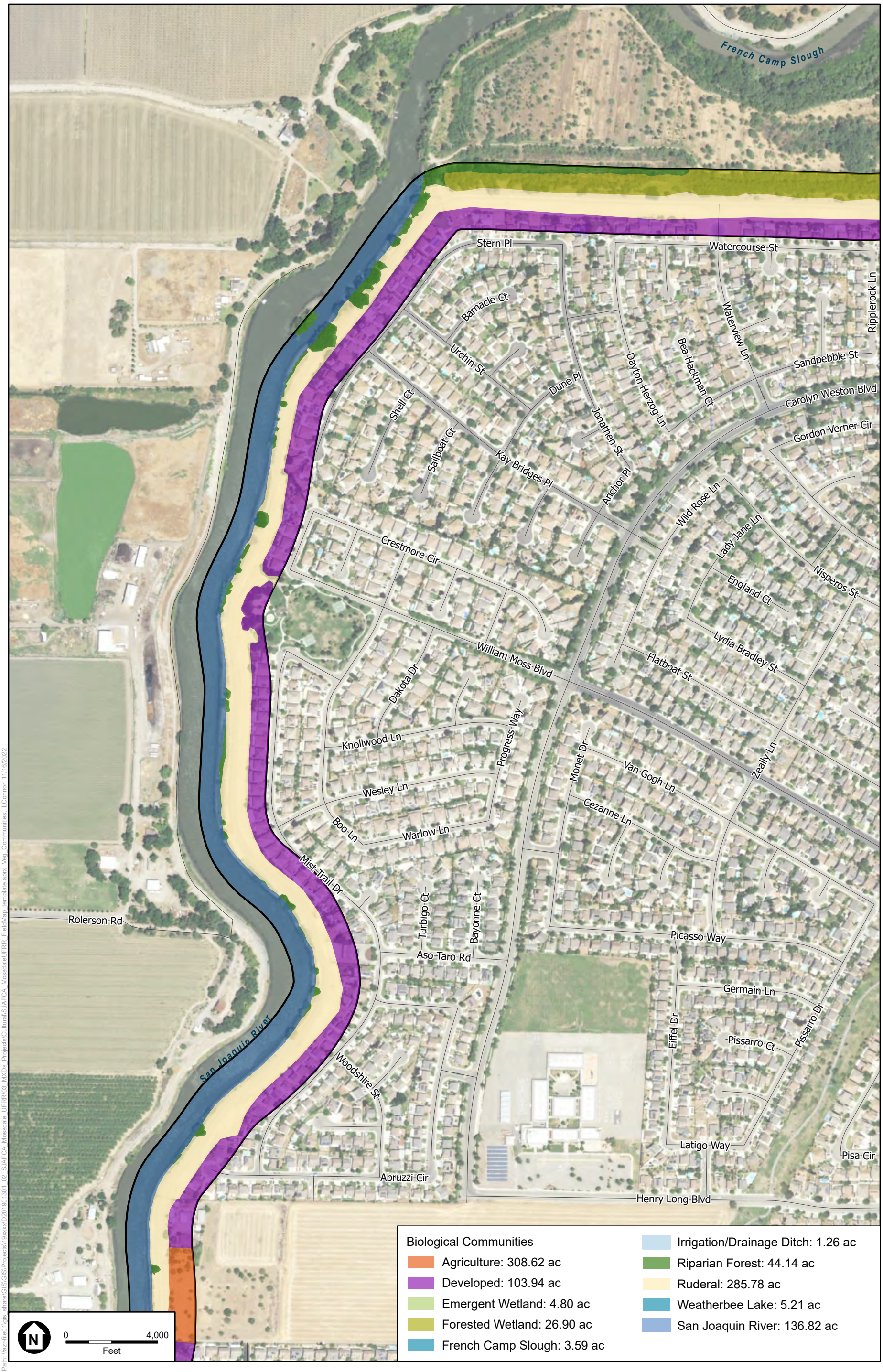
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 3-1 b
Biological Communities

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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 c
Biological Communities

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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 d
Biological Communities

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 e
Biological Communities

ESA



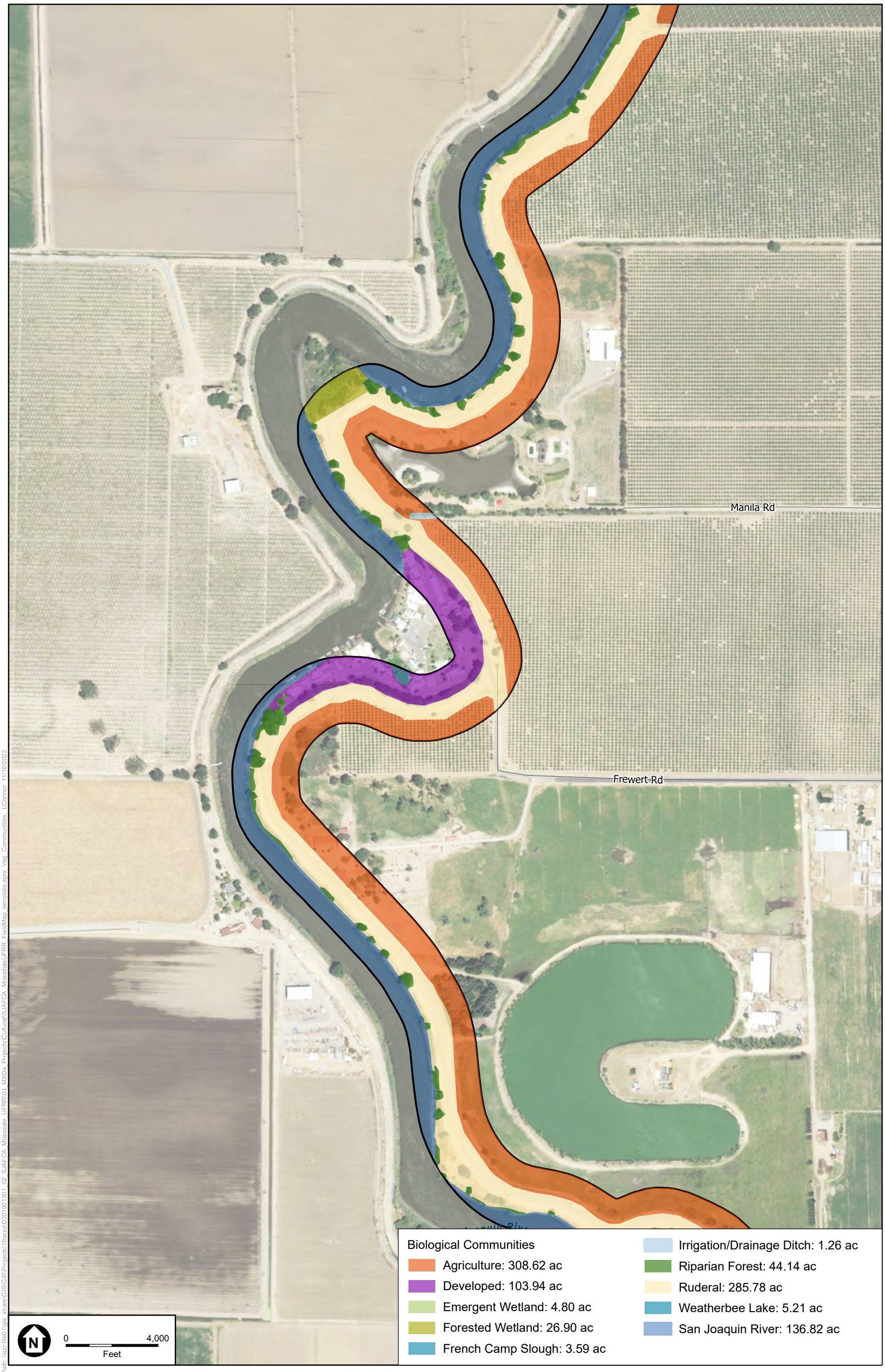
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 g
Biological Communities

ESA



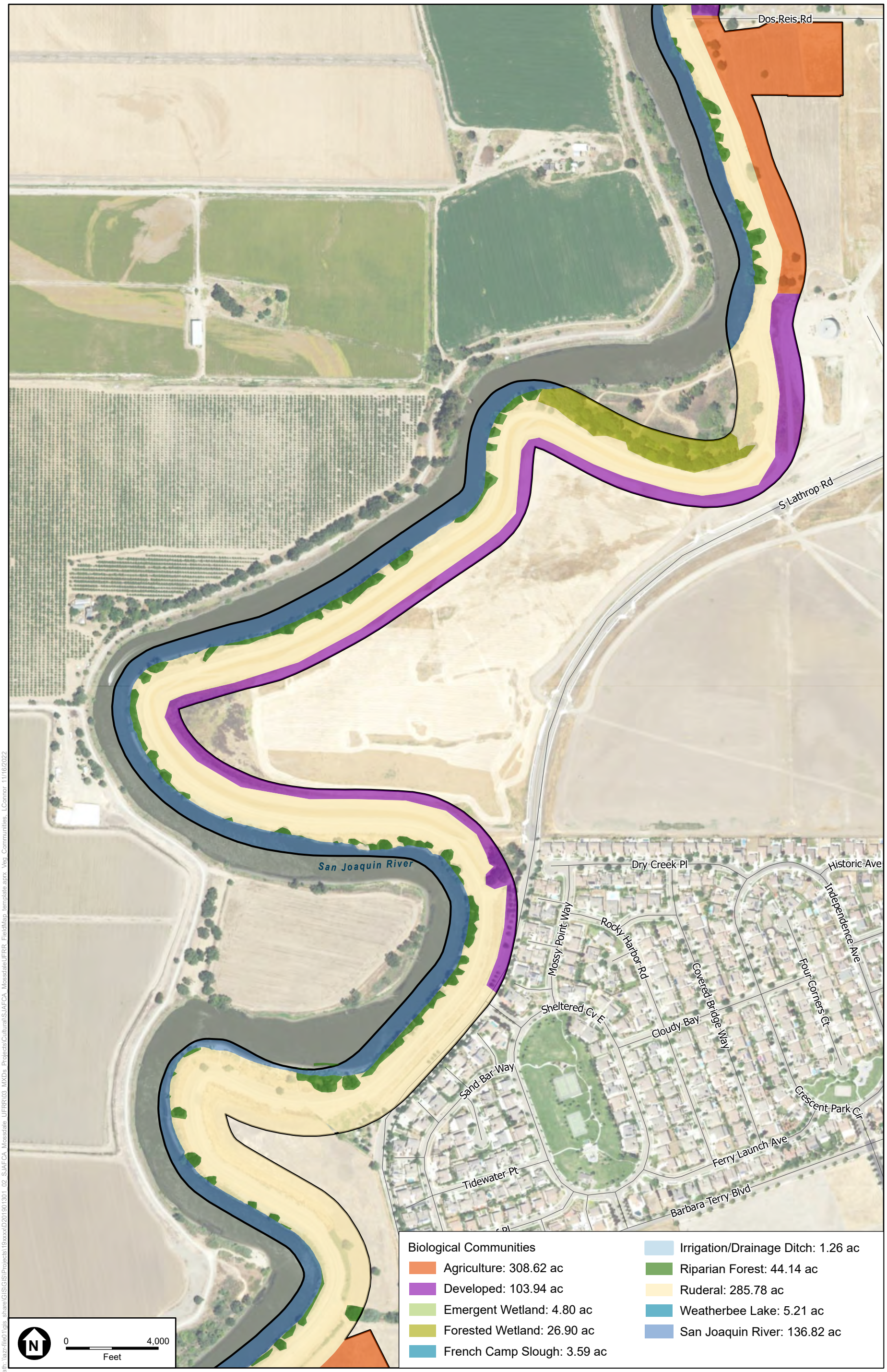
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 3-1 h
Biological Communities

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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 i
Biological Communities

ESA



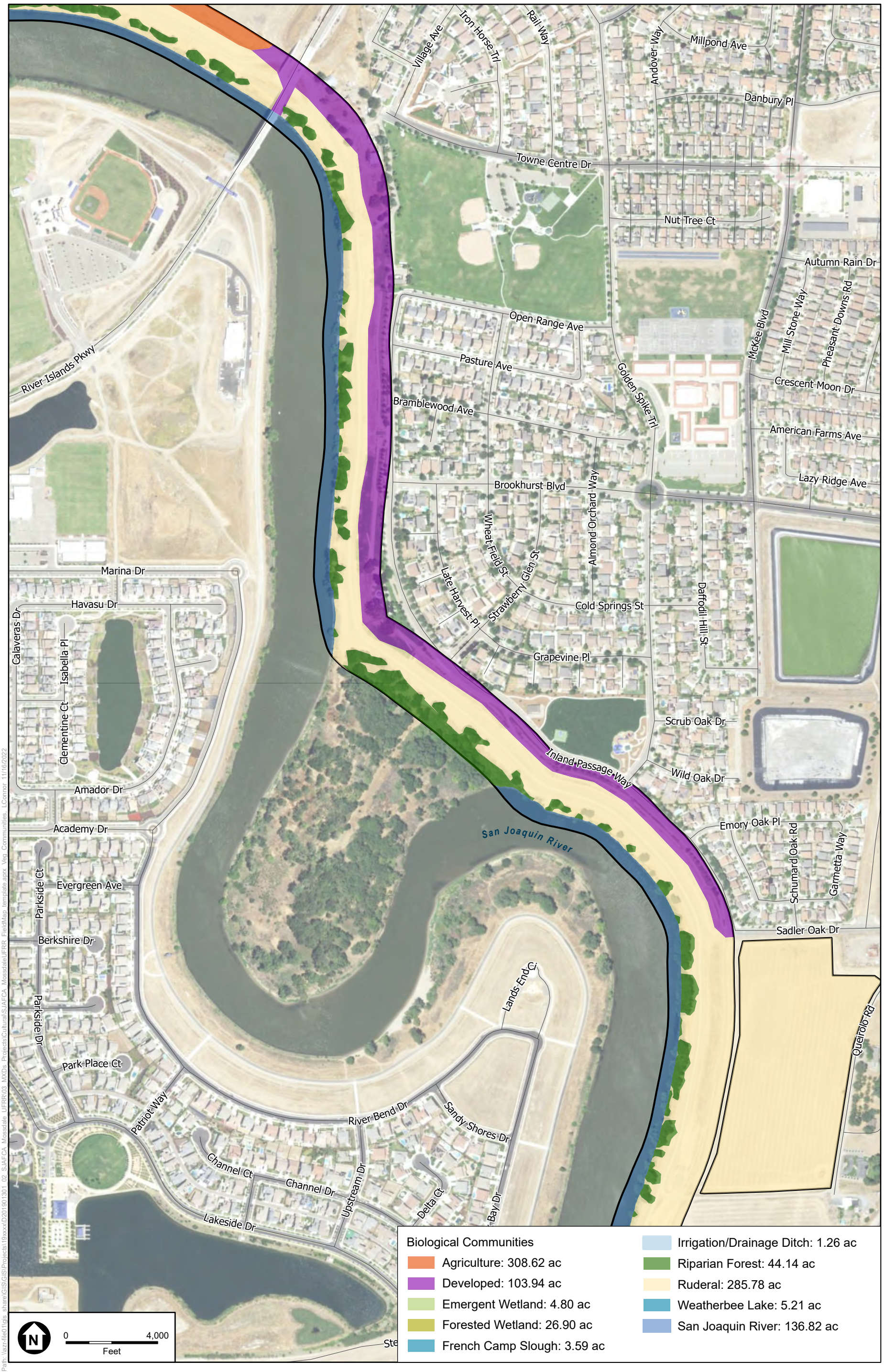
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 j
Biological Communities

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 3-1 k
Biological Communities

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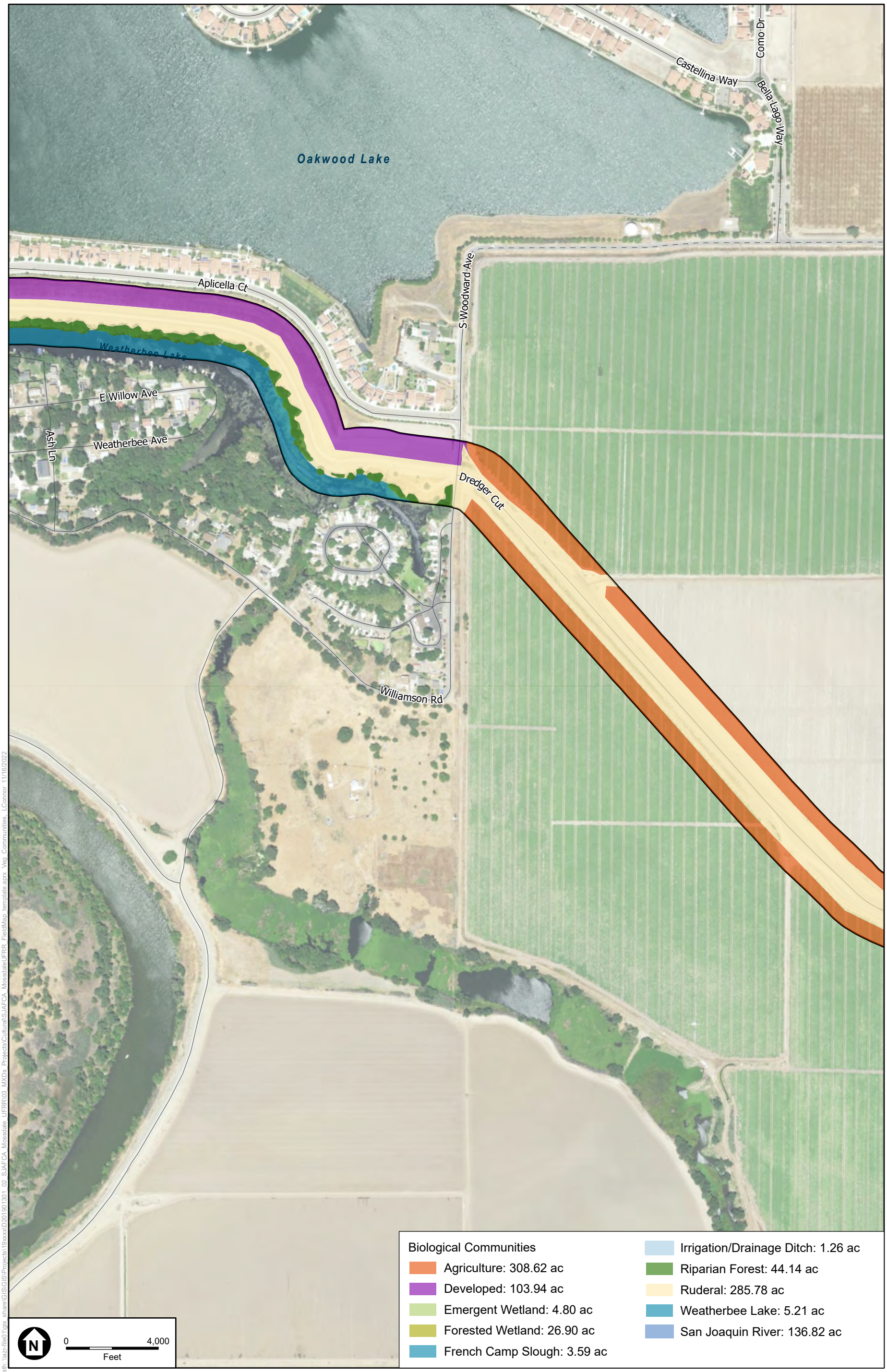
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Biological Communities

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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 n
Biological Communities

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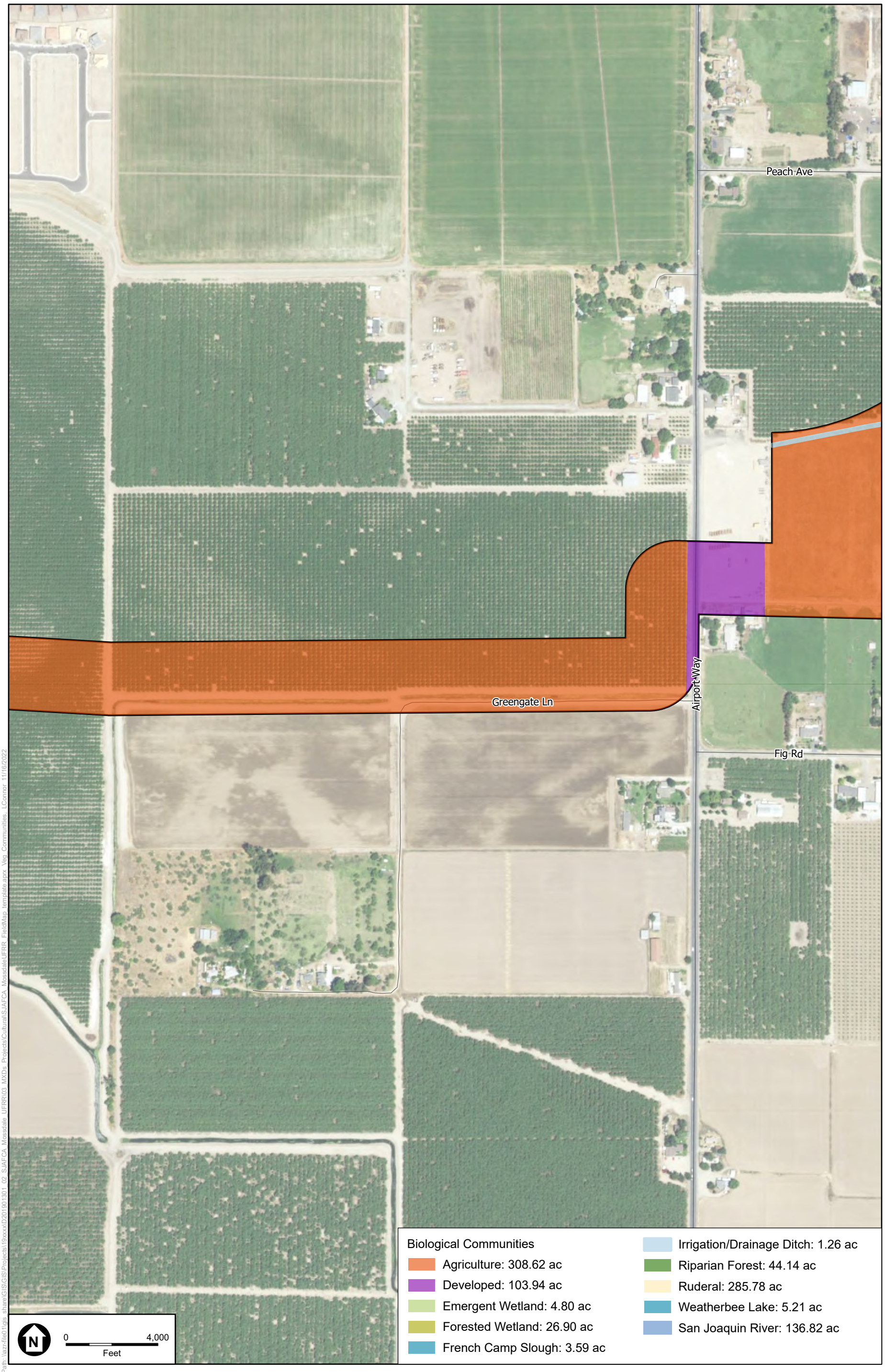
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 3-1 o
Biological Communities

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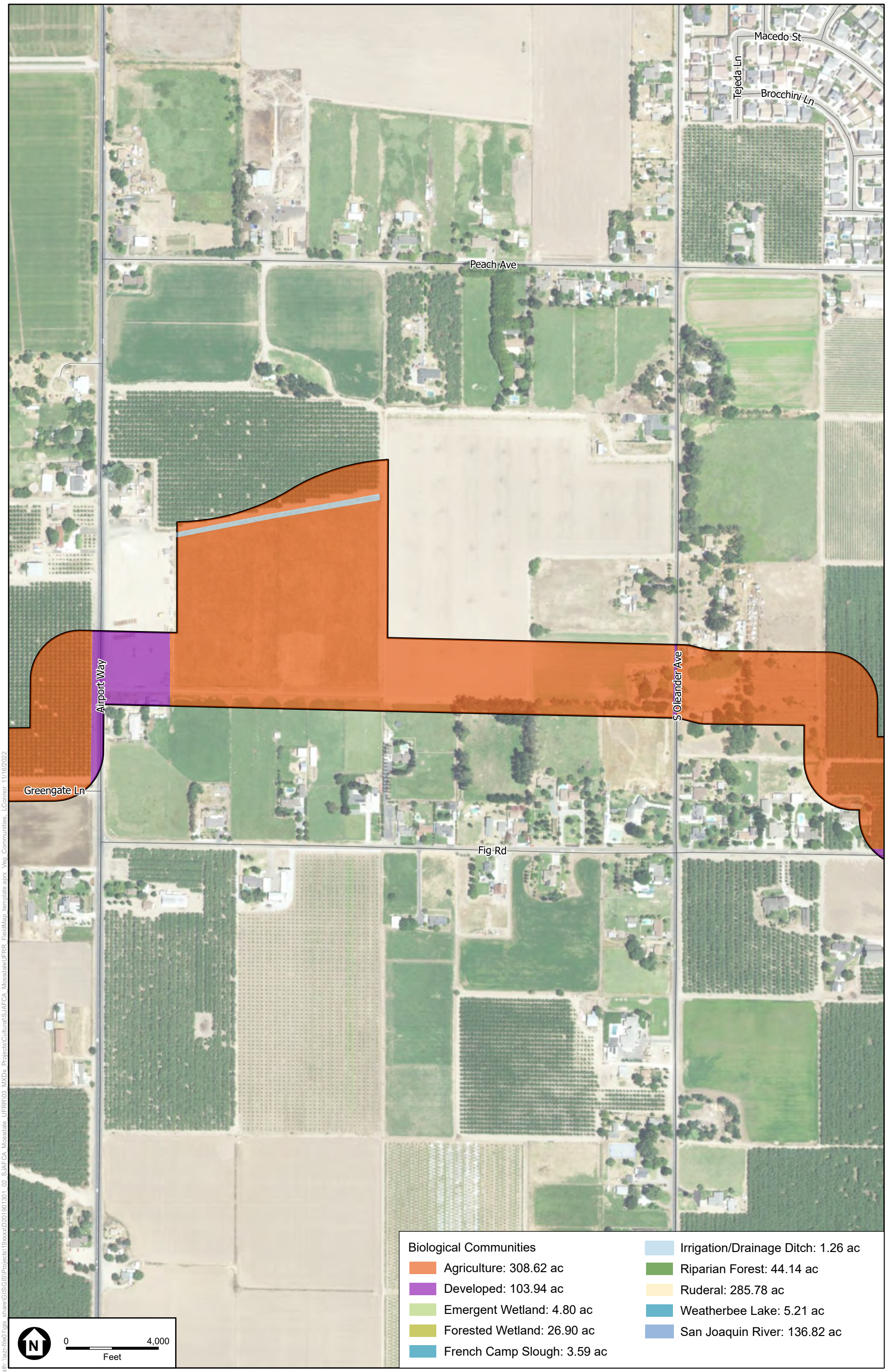
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 p
Biological Communities

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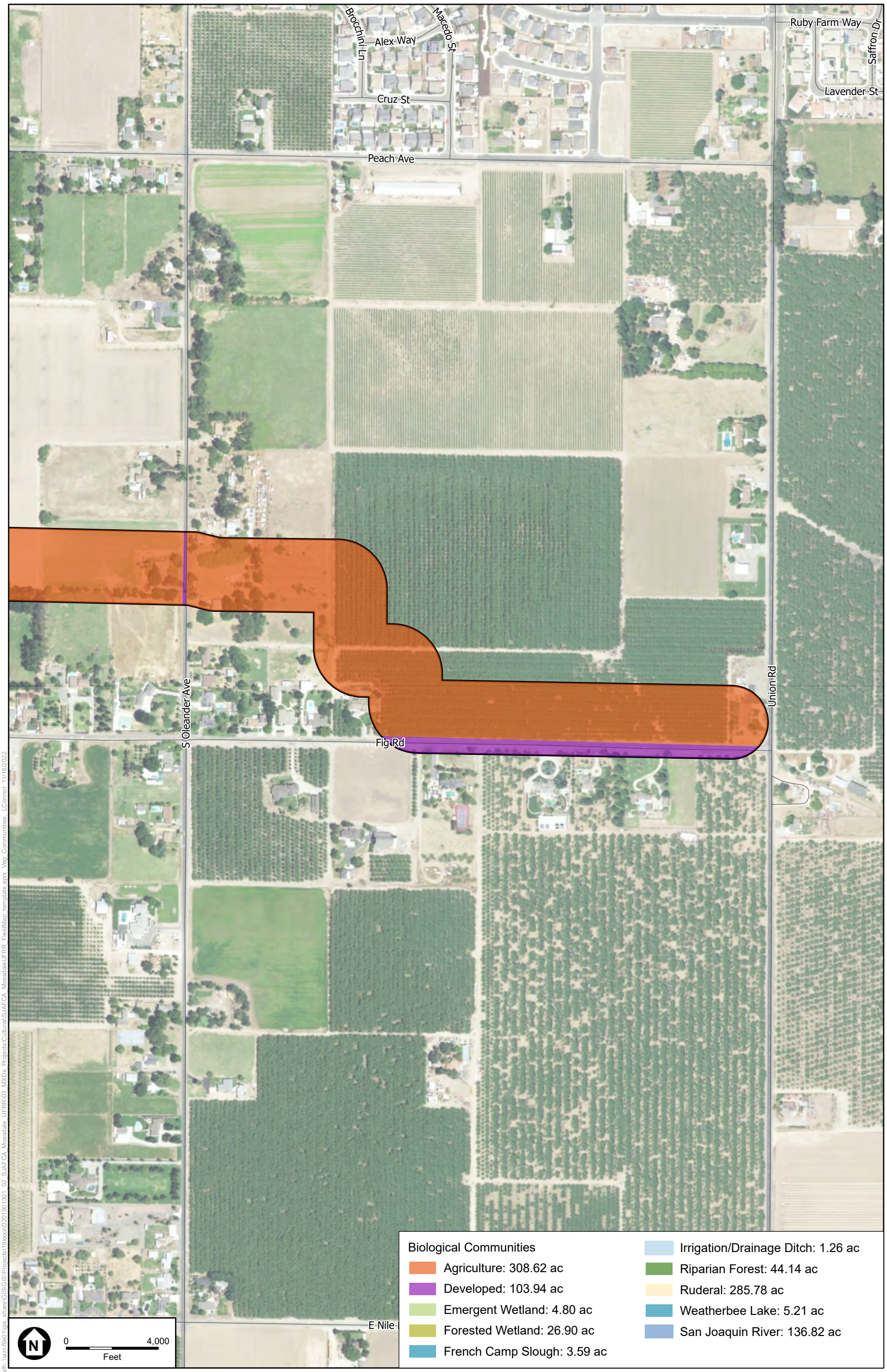


SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 3-1 q
Biological Communities

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 r
Biological Communities

ESA

3.3.1.2 French Camp Slough

French Camp Slough is a perennial, tidal waterway that is tributary to the San Joaquin River about 0.3 mile downstream of the study area. The high tide line was estimated based on the extent of open water visible on aerial photographs. French Camp Slough is less constrained by levees than the San Joaquin River and has much more gentle slopes near the high tide line. As a result, there are substantial areas of emergent wetland and forested wetland (see below) along French Camp Slough. French Camp Slough is a waters of the U.S. and state, and is considered a sensitive natural community.

3.3.1.3 Weatherbee Lake

Weatherbee Lake is a perennial, tidal waterbody formed by alterations made to Walthall Slough. Walthall Slough drains into Weatherbee Lake from the south. Weatherbee Lake consists of a relatively narrow area of open water with residential development on the south side and a steep levee on the north side (**Figure 3-3**). The side of the levee near the waterline has been covered with rock, which limits habitat potential for many special-status plants. At the downstream end on the west there is a floodgate. The floodgate was open during fieldwork and allows the passage of water (and small watercraft) between Weatherbee Lake and the San Joaquin River. Weatherbee Lake (and Walthall Slough) is a tributary to the San Joaquin River. Much of Weatherbee Lake was covered with the floating aquatic invasive weed water hyacinth (*Eichhornia crassipes*) during fieldwork. The high tide line was estimated based on the extent of open water visible on aerial photographs. Weatherbee Lake is a waters of the U.S. and state, and is considered a sensitive natural community.



Figure 3-3
A Typical View of the Margin of Weatherbee Lake

3.3.1.4 Ruderal

This community is highly disturbed. Much of the ruderal community consists of dirt levee road or gravel levee slope (**Figure 3-4**). Treed areas in the background of figure 3-4 are mapped as riparian forest. Vegetation is controlled on levee slopes with herbicide. Where present, vegetation consists mostly of annual nonnative weeds, including ripgut grass (*Bromus diandrus*), poison hemlock (*Conium maculatum*), summer mustard (*Hirschfeldia incana*), and Bermuda grass (*Cynodon dactylon*). Few trees or shrubs are present. Soils are mostly highly manipulated or compacted, and substantial areas have been covered with gravel. The ruderal community does not qualify as a sensitive natural community per CDFW (CDFW 2022a).



Figure 3-4
A Ruderal Area on the Top and Side of a Levee Along the San Joaquin River

3.3.1.5 Riparian Forest

This biological community is dominated by trees and occurs along waterbodies in the study area (**Figure 3-5**). In Figure 3-5 the trees overhang the river and understory vegetation is present (contrast with Figure 3-2). Both areas are mapped as riparian forest. The tallest trees in the canopy are mostly valley oak and Fremont cottonwood. Other common trees include Northern California black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), box elder (*Acer negundo*), and willow (*Salix* spp.). In most of the riparian forest, especially along the San Joaquin River, the lowest limbs of trees have been pruned, and smaller vegetation is kept controlled (Figure 3-2). As a result, the understory of much of the riparian forest is largely bare and little shrub or herb layer vegetation is present. Within a few feet of the waterline, the understory vegetation is not controlled and is similar to the understory vegetation of the forested wetland.

Most of the riparian forest is on steep levee slopes and is well above the high tide line of nearby waterbodies. Most of the riparian forest rarely experiences flooding and would not qualify as a wetland community. Riparian communities, regardless of wetland status, are considered sensitive natural communities by CDFW.



Figure 3-5
Riparian Forest Along the San Joaquin River

3.3.1.6 Forested Wetland

This biological community is similar to riparian forest except that it is lower in elevation relative to nearby waterbodies and more frequently flooded. The tree canopy is dominated by willows and box elder trees that tolerate longer periodic flooding, and less so by valley oak and walnut, trees more common in uplands. Blackberry (*Rubus* spp.) and button willow (*Cephalanthus occidentalis*) are common in the shrub layer. The herb layer may be very sparse where there is deep shade, and in more open areas is dominated by mugwort (*Artemisia douglasiana*), dock (*Rumex* spp.), whiteroot sedge (*Carex barbarae*), and stinging nettle (*Urtica dioica*). Forested wetland is likely to qualify as a wetland under criteria of the USACE, and as a waters of the U.S. and state since most of the forested wetland is adjacent to tidal waters. Forested wetland is a sensitive natural community.

3.3.1.7 Emergent Wetland

This biological community is periodically flooded by nearby waterbodies. It is dominated by rooted aquatic emergent plants including bulrush (*Schoenoplectus* sp.) and cattail (*Typha* sp.; **Figure 3-6**). There are few trees present. At the margins at slightly higher elevations the emergent wetland grades into forested wetland. Emergent wetland qualifies as a wetland under criteria of the USACE, and as a waters of the U.S. and state since most of the emergent wetland is adjacent to tidal waters. Emergent wetland is a sensitive natural community.



Figure 3-6
Emergent Wetland Surrounded by Forested Wetland.

3.3.1.8 Development

This community consists of commercial and dense residential development (**Figure 3-7**). It also includes most of the paved roads in the study area, as well as parks. Maintained landscaping, including trees, associated with urban development is included in this community. Most of the developed areas are residential areas on the land side of the levee. Development is not a sensitive natural community.



Figure 3-7
A Developed Area on the Water Side of the Levee Along the San Joaquin River

3.3.1.9 Agriculture

This community includes mostly row crops, orchards, and vineyards (**Figure 3-8**). It also includes some infrastructure associated with agricultural operations, including rural public roads and dirt access roads, and some rural residences and outbuildings. In addition, a small amount of irrigated pasture used for livestock grazing was included in the agriculture community. Agriculture is not a sensitive natural community.



Figure 3-8
An Agricultural Area on the Land Side of the Levee Along the San Joaquin River in A Potential Staging Area

3.3.1.10 Irrigation/Drainage Ditches

This community includes ditches used for irrigation or drainage of agricultural fields. This area includes ditches large enough that they appear to be permanent, and not ditches reconstructed annually for furrow irrigation. The ditches may be excavated periodically to improve water flow for agricultural operations. Some of the ditches have trees or emergent vegetation along their margins, and some are lined with concrete. Irrigation/drainage ditches are generally not a sensitive natural community, unless they qualify as waters of the U.S. or state. They may also provide habitat for sensitive plants or wildlife.

3.3.2 Special-Status Plants

A list of federal listed, candidate, or proposed species that potentially occur in or could be affected by projects within the boundary of the study area was obtained from the USFWS. The California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) online inventory were queried for known occurrences of special status species on the Lathrop and eight surrounding USGS quads. The results of the database queries (**Appendix C**) were used to assemble a table of special status plants evaluated (**Table 3-2**).

TABLE 3-2
SPECIAL STATUS PLANTS EVALUATED

Common Name Scientific Name	Listing Status USFWS/ CDFW/CRPR	General Habitat	Potential to Occur in the Study Area
Large-flowered fiddleneck *Amsinckia grandiflora*	FE/CE/1B.1	Annual herb found on grassy slopes in cismontane woodland and valley and foothill grassland from 850 to1,800 feet. Blooms from March through May.	**None.** The study area is outside the range, below the recorded elevation range, and does not have suitable habitat.
Alkali milk-vetch *Astragalus tener* var. *tener*	--/--/1B.2	Annual herb found in alkaline areas of playas, adobe clay valley and foothill grassland, and vernal pools from 5 to 200 feet. Blooms March through June.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Heartscale *Atriplex cordulata* var. *cordulata*	--/--/1B.2	Annual herb found in alkaline chenopod scrub, meadows and seeps, and valley and foothill grassland below about 1,850 feet. Blooms April through October.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Brittlescale *Atriplex depressa*	--/--/1B.2	Annual herb found in alkaline, clay substrates of chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and vernal pools from below about 1,050 feet. Blooms April through October.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Lesser saltscale *Atriplex minuscula*	--/--/1B.1	Annual herb found in alkaline, sandy substrates of chenopod scrub, playas, and valley and foothill grassland, from May through October from 50 to 650 feet. Blooms May through October.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Big tarplant *Blepharizonia plumosa*	--/--/1B.1	Annual herb generally found in clay soils of dry slopes in valley and foothill grassland from 100 to 1,650 feet. Blooms July through October.	**None.** The study area is outside the range and does not have suitable habitat.
Watershield *Brasenia schreberi*	--/--/2B.3	Aquatic perennial rhizomatous herb found in freshwater marshes and swamps below about 7,250 feet. Blooms June through September.	**Moderate.** The study area is in the range and the margins of aquatic habitats may provide potential habitat.
Bristly sedge *Carex comosa*	--/--/2B.1	Perennial rhizomatous herb found in wet areas of coastal prairie, lake margins, and valley and foothill grassland below about 2,050 feet. Blooms May through September.	**Moderate.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat
Succulent owl's-clover *Castilleja campestris* var. *succulenta*	FT/CE/1B.2	Annual herb found in vernal pools (often acidic) from 150 to 2,450 feet. Blooms April through May, and sometimes as early as March.	**None.** The study area does not have suitable habitat.
Palmate bracted bird's-beak *Chloropyron palmatum*	FE/CE/1B.1	Annual herb found in alkaline flats of chenopod scrub and annual and foothill grassland from 10 to 500 feet. Blooms from May through October.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Bolander's water-hemlock *Cicuta maculata* var. *bolanderi*	--/--/2B.1	Perennial herb found in coastal brackish or freshwater marshes and swamps below about 650 feet. Blooms July through September.	**Moderate.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat.

TABLE 3-2 (CONTINUED)
SPECIAL STATUS PLANTS EVALUATED

Common Name Scientific Name	Listing Status USFWS/ CDFW/CRPR	General Habitat	Potential to Occur in the Study Area
Slough Thistle *Cirsium crassicaule*	--/--/1B.1	Annual to perennial herb found in freshwater marshes below about 350 feet. Blooms May through August.	**High.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat. There is a 1933 record in or near the study area.
Recurved larkspur *Delphinium recurvatum*	--/--/1B.2	Perennial herb found in alkaline substrates of chenopod scrub, cismontane woodland, and valley and foothill grassland from 10 to 2,600 feet. Blooms March through June.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Delta button-celery *Eryngium racemosum*	--/CE/1B.1	An annual to perennial herb found in vernally mesic clay depressions of riparian scrub from about 10 to 100 feet. Blooms June through October, and sometimes as early as May.	**None.** The study area does not have suitable habitat.
Spiny-sepaled button-celery *Eryngium spinosepalum*	--/--/1B.2	An annual to perennial herb found in vernal pools of valley and foothill grassland from about 250 to 3,200 feet. Blooms April through June.	**None.** The study area does not have suitable habitat.
Diamond-petaled California poppy *Eschscholzia rhombipetala*	--/--/1B.1	Annual herb found in alkaline, clay substrates of valley and foothill grassland below 3,200 feet. Blooms March through April.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
San Joaquin spearscale *Extriplex joaquinana*	--/--/1B.2	Annual herb found in alkaline chenopod scrub, meadows and seeps, playas, and valley and foothill grassland below about 2,750 feet. Blooms April through October.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Woolly rose-mallow *Hibiscus lasiocarpos* var. *occidentalis*	--/--/1B.2	An emergent perennial rhizomatous herb found in freshwater marshes and swamps from about 0 to 400 feet. Often found in riprap on sides of levees. Blooms from June through November.	**Moderate.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat.
Alkali-sink goldfields *Lasthenia chrysantha*	--/--/1B.1	Annual herb found in alkaline vernal pools from 0 to 650 feet. Blooms February through April.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Delta tule pea *Lathyrus jepsonii* var. *jepsonii*	--/--/1B.2	Perennial herb found in brackish or freshwater marshes and swamps below 15 feet. Blooms May through July, and sometimes into September.	**Moderate.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat.
Legenere *Legenere limosa*	--/--/1B.1	Annual herb found in vernal pools and areas of similar hydrology from 5 to 2,885 feet. Blooms April through June.	**None.** The study area does not have suitable habitat.
Mason's lilaeopsis *Lilaeopsis masonii*	--/CR/1B.1	Perennial rhizomatous herb found in tidal brackish and freshwater marshes, swamps, and riparian scrub from 0 to 35 feet. Blooms April through November.	**Moderate.** The study area is in the range. The margins of watercourses may provide potential habitat.

TABLE 3-2 (CONTINUED)
SPECIAL STATUS PLANTS EVALUATED

Common Name Scientific Name	Listing Status USFWS/ CDFW/CRPR	General Habitat	Potential to Occur in the Study Area
Delta mudwort *Limosella australis*	--/--/2B.1	Perennial stoloniferous herb found in mud or sand along streambanks of brackish or freshwater marshes and swamps and riparian scrub below 10 feet. Blooms May through August.	**Moderate.** The study area is in the range. The margins of watercourses may provide potential habitat.
Shining navarretia *Navarretia nigelliformis* ssp. *radians*	--/--/1B.2	Annual herb found in clay depressions and vernal pools in cismontane woodland and grassland from 200 to 3,300 feet. Blooms April through July, and sometimes as early as March.	**None.** The study area does not have suitable habitat.
California alkali grass *Puccinellia simplex*	--/--/1B.2	Annual herb found in mesic, alkaline substrates of flats and lake margins or vernal pools within chenopod scrub, meadows and seeps, and valley and foothill grassland below about 3,050 feet. Blooms March through May.	**None.** The study area does not have areas of alkaline influence.
Sanford's arrowhead *Sagittaria sanfordii*	--/--/1B.2	Aquatic emergent perennial rhizomatous herb found in shallow freshwater marshes, swamps, ponds, and ditches from 0 to 2,150 feet. Blooms from May through October.	**Moderate.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat.
Marsh skullcap *Scutellaria galericulata*	--/--/2B.2	Perennial rhizomatous herb found in mesic lower montane coniferous forest, meadows and seeps, and marshes and swamps below about 6,900 feet. Blooms June through September.	**Moderate.** The study area may be in the range. Emergent wetland, forested wetland, and the margins of aquatic habitats may provide potential habitat.
Side-flowering skullcap *Scutellaria lateriflora*	--/--/2B.2	Perennial rhizomatous herb found in mesic meadows, seeps, marshes, and swamps below about 1,650 feet. Blooms July through September.	**Moderate.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat.
Chaparral ragwort *Senecio aphanactis*	--/--/2B.2	Annual herb found in alkaline flats or dry open rocky areas of chaparral, cismontane woodland, and coastal scrub below about 2,600 feet. Blooms January through May.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Long-styled sand-spurrey *Spergularia macrotheca* var. *longistyla*	--/--/1B.2	Perennial herb found in alkaline meadows, seeps, marshes, mud flats, and hot springs below about 850 feet. Blooms February through May.	**None.** The study area does not have areas of alkaline influence.
Suisun Marsh aster *Symphyotrichum lentum*	--/--/1B.2	Perennial rhizomatous herb found in brackish and freshwater marshes and swamps from 0 to 10 feet. Blooms from Late April or May through November.	**Moderate.** The study area is in the range. Emergent wetland and the margins of aquatic habitats may provide potential habitat.

TABLE 3-2 (CONTINUED)
SPECIAL STATUS PLANTS EVALUATED

Common Name Scientific Name	Listing Status USFWS/ CDFW/CRPR	General Habitat	Potential to Occur in the Study Area
Wright's trichocoronis *Trichocoronis wrightii* var. *wrightii*	--/--/1B.2	Annual herb found in alkaline areas of meadows and seeps, marshes and swamps, riparian forest, and vernal pools from 15 to 1,450 feet. Blooms Mary through September.	**None.** The study area does not have areas of alkaline influence.
Saline clover *Trifolium hydrophilum*	--/--/1B.2	Annual herb found in mesic and alkaline open areas of marshes and swamps, valley and foothill grasslands, and vernal pools from 0 to 985 feet. Blooms April through June.	**None.** The study area does not have areas of alkaline influence.
Caper-fruited tropidocarpum *Tropidocarpum capparideum*	--/--/1B.1	Annual herb found in alkaline hills of valley and foothill grassland below about 1,500 feet. Blooms March through April.	**None.** The study area does not have areas of alkaline influence or suitable habitat.
Greene's tuctoria *Tuctoria greenei*	FE/CR/1B.1	Annual herb found in vernal pools from 100 to 3,500 feet. Blooms May through July, and sometimes into September.	**None.** The study area does not have suitable habitat.

STATUS CODES:

Federal
FE = listed as endangered under the ESA
FT = listed as threatened under the ESA

State
SE = listed as endangered under CESA
ST = listed as threatened under CESA
CR = listed as rare under NPPA

California Rare Plant Rank (CRPR)
Rank 1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B = Plants rare, threatened, or endangered in California and elsewhere.
Rank 2A = Plants presumed extirpated in California, but more common elsewhere.
Rank 2B = Plants rare, threatened, or endangered in California, but more common elsewhere.

An extension reflecting the level of threat to each species is appended to each rarity category as follows:
.1 – Seriously endangered in California.
.2 – Fairly endangered in California.
.3 – Not very endangered in California.

REFERENCES: CNPS 2022, Jepson 2022

Twelve species from Table 3-2 with a moderate or higher potential to occur are discussed further below.

3.3.2.1 Watershield (*Brasenia schreberi*)

Watershield is a perennial aquatic herb with rhizomes that root in mud and floating leaves found in ponds or slow streams. In California watershield is known from below about 7,250 feet in elevation in the Klamath and north Coast Ranges, high Cascade Range and Sierra Nevada, Modoc Plateau, and Sacramento Valley. The only record of watershield near the study area is a geographically imprecise mention of a site name in a 1925 flora, mapped by CNDDB as a "best guess" near downtown Stockton (Occurrence 7). There are other CNDDB records farther north in the Delta from 1893 (Occurrence 10, believed to be extirpated) and 1976 (Occurrence 11).

The aquatic edges of waterbodies in the study area provide potential habitat for watershield. The habitat is marginal because 1) many areas along the edges are covered in riprap, 2) most areas are relatively steep and most records of watershield are from more gently sloped aquatic beds, 3) the waterbodies, particularly the San Joaquin River sometimes experiences strong and fast currents, and 4) the best potential habitat areas for watershield are heavily invaded by the nonnative water hyacinth (*Eichhornia crassipes*). Watershield was not found during the botanical survey.

3.3.2.2 Bristly sedge (*Carex comosa*)

Bristly sedge is a perennial cespitose herb that grows in moist to wet places in coastal prairie, marshes, and grassland. In California, bristly sedge is known from below about 2,050 feet in elevation in the Klamath and inner north Coast Ranges, high Cascade Range, Modoc Plateau, Central Valley, Bay Area and northern central coast, and San Bernardino Mountains. The only record of bristly sedge near the study area is a geographically imprecise 1928 collection mapped by CNDDB near Holt, approximately 4.9 miles east of the study area (Occurrence 3). There are other more recent CNDDB records farther north in the Delta.

The edges of waterbodies, margins of emergent wetland, and more open and sunny areas of forested wetland in the study area provide potential habitat for bristly sedge. Good habitat in the study area is limited because many areas along the edges of waterbodies are covered in riprap. Bristly sedge was not found during the botanical survey.

3.3.2.3 Bolander's water-hemlock (*Cicuta maculata* var. *bolanderi*)

Bolander's water-hemlock is a perennial rhizomatous herb found in brackish or freshwater coastal wetlands. In California Bolander's water-hemlock is known from below about 650 feet in elevation in the Delta and central/south coast. The nearest records of Bolander's water-hemlock to the study area are from over 20 miles farther west and north in the Delta (Occurrences 15 and 16). Most regional records are from further downstream in the Delta or in the vicinity of Suisun Bay.

The edges of waterbodies, margins of emergent wetland, and more open and sunny areas of forested wetland in the study area provide potential habitat for Bolander's water-hemlock. Good habitat in the study area is limited because many areas along the edges of waterbodies are covered in riprap. Bolander's water-hemlock was not found during the botanical survey.

3.3.2.4 Slough thistle (*Cirsium crassicaule*)

Slough thistle is an annual or biennial herb found in freshwater marshes or wet areas in chenopod or riparian scrub. Slough thistle is known from below about 350 feet in elevation in the San Joaquin Valley. Most records are from much farther south near Bakersfield, but three collections from 1893–1896 are from very near or in the study area (Jepson 2022). Slough thistle was reported from the shallow water of a canal along the San Joaquin River in the vicinity of Lathrop. CNDDB (Occurrence 2) notes slough thistle was last seen near this occurrence in 1933 and the the area was searched again unsuccessfully in 1974. Another CNDDB record (Occurrence 1) of

fewer than 10 plants along the San Joaquin River from 1974 is about 5 air miles south of the study area.

The edges of waterbodies, margins of emergent wetland, and more open and sunny areas of forested wetland in the study area provide potential habitat for slough thistle. Good habitat in the study area is limited because many areas along the edges of waterbodies are covered in riprap. Slough thistle was not found during the botanical survey.

3.3.2.5 Woolly rose-mallow (*Hibiscus lasiocarpos* var. *occidentalis*)

Woolly rose-mallow is a perennial rhizomatous herb to sub-shrub that grows in freshwater marshes, and is often found in riprap on levees. In California woolly rose-mallow is known from below about 400 feet in elevation in the Central Valley and Cascade foothills. There are hundreds of geographically precise records of woolly rose-mallow regionally, but they are all from lower or farther north in the Delta. The nearest CNDDB record is from about 4 air miles downstream of the study area near the confluence of the Calaveras and San Joaquin rivers (Occurrence 11).

The edges of waterbodies (including areas of riprap), emergent wetland, and forested wetland in the study area provide potential habitat for woolly rose-mallow, although it has not been previously reported as far upstream in the south Delta as the study area. Woolly rose-mallow was not found during the botanical survey.

3.3.2.6 Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*)

Delta tule pea is a perennial herb found in brackish or freshwater marshes along coasts or estuaries. Delta tule pea is known from below about 15 feet in elevation in the Delta and Bay Area. There are hundreds of geographically precise records of Delta tule pea regionally, but they are all from farther downstream or farther north in the Delta, or from Suisun Bay or farther west. The nearest CNDDB record to the study area is a geographically imprecise record covering all of Rough and Ready Island near the Port of Stockton based on a 1903 collection (Occurrence 9), about 2.2 air miles northwest of the study area. The nearest recent and geographically precise records are over 10 air miles east and northwest of the study area.

The edges of waterbodies, margins of emergent wetland, and more open and sunny areas of forested wetland in the study area provide potential habitat for Delta tule pea. Delta tule pea was not found during the botanical survey. The more common subspecies, *Lathyrus jepsonii* var. *californicus* was found in a single location in the study area, on a small island in the San Joaquin River (see Figure 3-3). The more common subspecies is differentiated from Delta tule pea primarily by its more puberulent leaves and stems. A collection of *Lathyrus jepsonii* var. *californicus* was made and will be deposited at the UC Davis herbarium (temporary collection number of Hughes 489).

3.3.2.7 Mason's lilaeopsis (*Lilaeopsis masonii*)

Mason's lilaeopsis is a short (up to a few inches), perennial rhizomatous herb found in the intertidal elevations of brackish or freshwater marshes and streambanks, generally growing on

relatively open mud that is not entirely shaded by taller vegetation. Mason's lilaeopsis is known from below about 35 feet in elevation in the Delta and Bay Area. There are hundreds of geographically precise records of Mason's lilaeopsis regionally, but they are all from farther downstream or farther north in the Delta, or from Suisun Bay or farther west. The nearest CNDDB records to the study area are 5.5–9.3 air miles north and east of the study area.

The aquatic edges of waterbodies in the study area provide potential habitat for Mason's lilaeopsis. The habitat is marginal because 1) many areas along the edges are covered in riprap, 2) most areas are relatively steep and more gently sloped intertidal mudflats provide better habitat, and 3) the best potential habitat areas for Mason's lilaeopsis are heavily invaded by the nonnative water hyacinth. Mason's lilaeopsis was not found during the botanical survey.

3.3.2.8 Delta mudwort (*Limosella australis*)

Delta mudwort is a short (up to a few inches), annual herb found in the intertidal elevations of brackish or freshwater marshes and streambanks, generally growing on relatively open mud or sand that is not entirely shaded by taller vegetation. In California Delta mudwort is known from below about 10 feet in elevation in the Delta. There are dozens of geographically precise records of Delta mudwort regionally, but they are all from farther downstream or farther north in the Delta. The nearest CNDDB record to the study area is about 9.4 air miles east of the study area (Occurrence 35).

The aquatic edges of waterbodies in the study area provide potential habitat for Delta mudwort. The habitat is marginal because 1) many areas along the edges are covered in riprap, 2) most areas are relatively steep and more gently sloped intertidal flats provide better habitat, and 3) the best potential habitat areas for Delta mudwort are heavily invaded by the nonnative water hyacinth. Delta mudwort was not found during the botanical survey.

3.3.2.9 Sanford's arrowhead (*Sagittaria sanfordii*)

Sanford's arrowhead is an aquatic emergent perennial herb from tubers that grows in freshwater marshes, ponds, and ditches. Sanford's arrowhead is known from below about 2,150 feet in elevation in the Klamath Ranges, Cascade foothills, Central Valley, and north and south coast. The nearest CNDDB record is a geographically imprecise 1901 collection mapped near downtown Stockton (Occurrence 54). Nearly all regional records are in the north Delta or farther north, or much farther south of the study area near Merced.

The edges of waterbodies and emergent wetland in the study area provide potential habitat for Sanford's arrowhead. Good habitat in the study area is limited because many areas along the edges of waterbodies are covered in riprap. Sanford's arrowhead was not found during the botanical survey.

3.3.2.10 Marsh skullcap (*Scutellaria galericulata*)

Marsh skullcap is a perennial rhizomatous herb found along streambanks and in wet sites in meadows and conifer forest. Jepson (2022) identifies the range as the northern high Sierra

Nevada and Modoc Plateau above about 3,000 feet in elevation. However, there have been several reports, including some collections from the Delta (CNDDB occurrences 1, 2, 3, 29, 30). All the occurrences are much farther east or north in the Delta than the study area. The nearest is about 9.4 air miles east.

The edges of waterbodies, emergent wetland, and forested wetland in the study area may provide potential habitat for marsh skullcap. Marsh skullcap was not found during the botanical survey.

3.3.2.11 Side-flowering skullcap (*Scutellaria lateriflora*)

Side-flowering skullcap is a perennial rhizomatous herb found in marshes and mesic meadows. Side-flowering skullcap is known from the Central Valley and areas of the Great Basin floristic province below about 1,650 feet in elevation. The nearest CNDDB record is a geographically imprecise 1892 collection mapped on Bouldin Island (Occurrence 2) about 14 miles northwest of the study area. All other regional records are farther north in the Delta. Many of the CNDDB records note that side-flowering skullcap was found growing on downed logs near the waterline.

The edges of waterbodies, emergent wetland, and forested wetland in the study area may provide potential habitat for side-flowering skullcap. Side-flowering skullcap was not found during the botanical survey.

3.3.2.12 Suisun marsh aster (*Symphyotrichum lentum*)

Suisun marsh aster is a perennial rhizomatous herb found in brackish or freshwater marshes along coasts or estuaries. Suisun marsh aster is known from below about 10 feet in elevation in the Sacramento Valley (primarily lower Delta), Bay Area, and central coast. There are hundreds of geographically precise records of Suisun marsh aster regionally, but they are all from farther downstream or farther north in the Delta, or from Suisun Bay or farther west. The nearest CNDDB record to the study area is a geographically imprecise record in the lower Calaveras River based on a 1926 collection (Occurrence 200), about 4 air miles north of the study area. The nearest recent and geographically precise records begin about 6.5 air miles northwest of the study area.

The edges of waterbodies and emergent wetland in the study area provide potential habitat for Suisun marsh aster. Suisun marsh aster was not found during the botanical survey.

3.4 Summary

No special status plants were found in the study area. The following sensitive natural communities occur in the study area:

- San Joaquin River
- French Camp Slough
- Weatherbee Lake

- Forested Wetland
- Emergent Wetland
- Riparian Forest

All of these sensitive natural communities are likely to qualify as both waters of the U.S. and State, except for riparian forest. The San Joaquin River, French Camp Slough, and Weatherbee Lake are tidal waters. All waters "which are subject to the ebb and flow of the tide" are waters of the U.S. (Title 33 §328.3(a) Code of Federal Regulations [CFR], 2014 annual edition). Forested wetland and emergent wetland are likely to qualify as adjacent wetlands (Title 33 §328.3(c)) because they are likely to meet the USACE 3-parameter test for wetlands and are "bordering, contiguous, or neighboring" the tidal waterbodies in the study area. Adjacent wetlands are waters of the U.S. Discharge of dredged or fill material into a waters of the U.S. is regulated by Section 404 of the federal Clean Water Act. All waters of the U.S. also qualify as waters of the State. Waters of the State are regulated under the Porter-Cologne Water Quality Control Act.

Riparian forest is unlikely to meet the USACE 3-parameter test for wetlands. However, CDFW considers riparian areas to be sensitive natural communities. CDFW is likely to determine that construction activities near waters and wetlands need a Streambed Alteration Agreement (§1600 *et seq.* California Fish and Game Code). CDFW considers a project's impacts to sensitive natural communities such as riparian forest during the Streambed Alteration Agreement process.

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CHAPTER 4
Special-Status Wildlife

4.1 Purpose

This chapter documents the suitability of the study area to support special-status wildlife resources, and the results of a reconnaissance-level survey for special-status terrestrial wildlife.

4.2 Methods

Before conducting reconnaissance-level wildlife surveys, ESA reviewed publicly available and subscription-based data on biological resources. The field surveys provided partial confirmation of the accuracy of publicly available data. The following data sources assisted in this analysis:

- Topographic maps (Lathrop and surrounding eight 7.5-minute quadrangles) (USGS 2022)
- Historic and current aerial imagery (Google, Inc. 2022)
- California Wildlife Habitat Relationships database (CDFW 2021)
- The CDFW CNDDB for the quadrangles indicated below (CDFW 2022a; Appendix C)
- A USFWS species list for the study area in Figure 3-1 generated using the online Information for Planning and Consultation (IPaC) database (USFWS 2022b) (Appendix C)

Several wildlife species known to occur in or in the vicinity of the study area are protected under Federal and/or State endangered species laws or have been designated as species of special concern by CDFW. In addition, Section 15380(b) of the State California Environmental Quality Act (CEQA) Guidelines provides a definition of rare, endangered, or threatened species that are not included in any listing. “Special-status species” is a collective term for wildlife identified by a variety of laws and regulations. The term “special-status species” as evaluated in this report include those identified in the CNDDB and IPaC databases listed above.

A list of regionally occurring special status species were compiled from a nine-quadrangle search of the California Natural Diversity Database (CDFW 2022a); a search of the U.S. Fish and Wildlife Service Information for Planning and Consultation endangered species database (USFWS 2022c); and literature regarding the biological resources of the region. In addition to the above resources, background information for the Project can be found in the ARCF GRR Final EIS/EIR (USACE 2016), which was reviewed during preparation of this report. The search encompassed the following 7.5-minute U.S. Geological Survey topographic quadrangles:

Holt	Stockton West	Stockton East
Union Island	Lathrop	Manteca
Tracy	Vernalis	Ripon

Each species on the list was assessed individually based on its habitat requirements and distribution relative to the location and vegetation communities that occur in and around the study area.

The "Potential to Occur" categories are defined as follows:

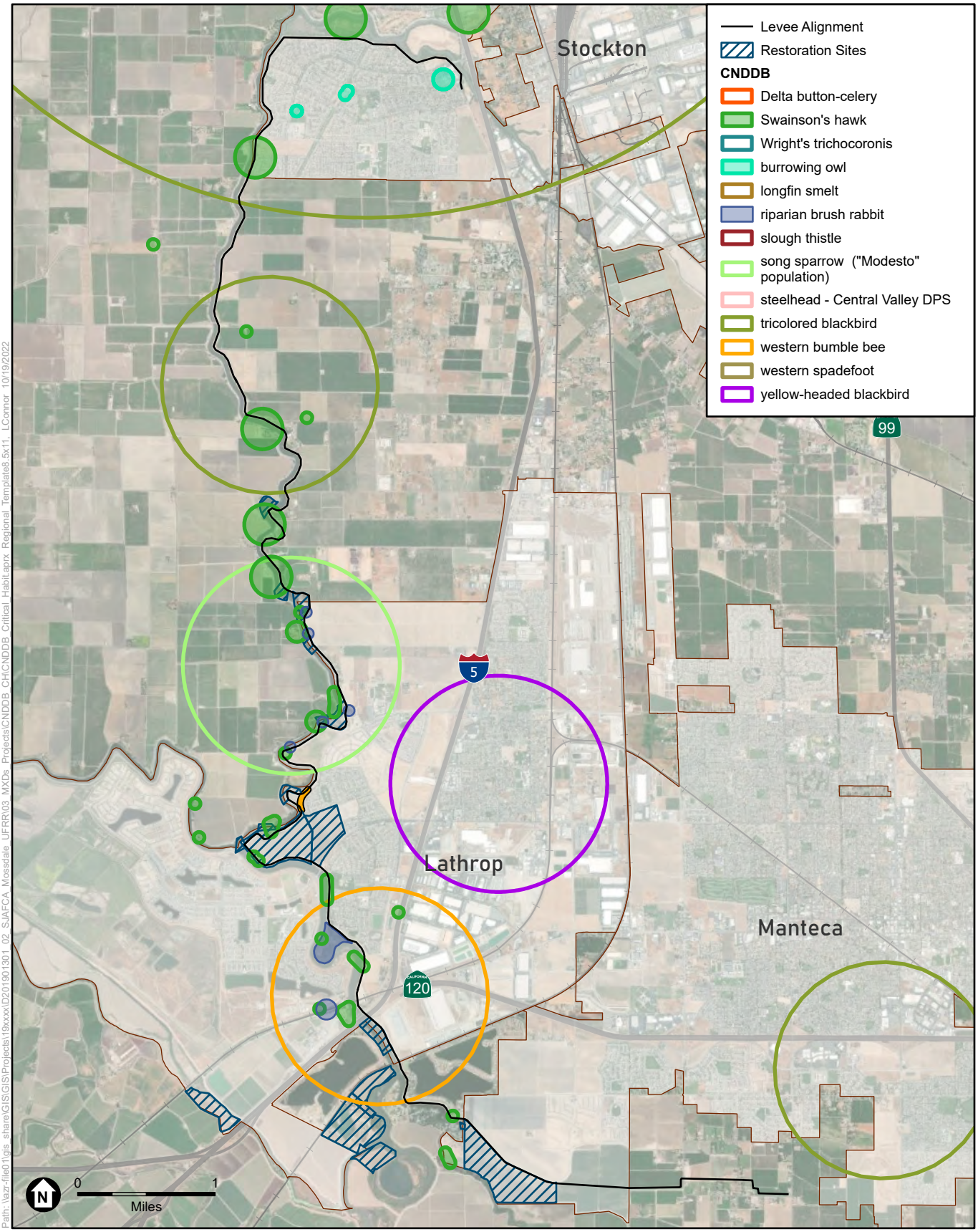
- **Low**: The study area provides only limited and low-quality habitat for a particular species. In addition, the known range for a particular species may be outside of the study area.
- **Moderate**: The study area and/or immediate vicinity provides suitable habitat for a particular species.
- **High**: The study area and/or immediate vicinity provide ideal habitat conditions for a particular species and/or known populations occur in the study area s or within its immediate vicinity.
- **Present:** The species was observed during the biological surveys within the study area**.**

If habitat was not present or the study area is outside of the known range of the species, the species was assumed absent and excluded from the list. Those species with a moderate or high potential to occur in the study area, and those observed during biological surveys of the study area, are described in Section 4.5, "Special-Status Wildlife Species," in greater detail.

ESA Biologist/Botanist Chuck Hughes conducted field surveys in 2022 on June 6, 7, 15, and 29, and September 1 and 29. ESA Biologist Aaron Lopez assisted on June 6, 7, and 15. ESA Biologist Zach Leisz assisted on June 29 and September 1. The surveys were conducted to observe vegetation communities, to assess habitat quality, and to determine the potential for common and special-status wildlife species to occur.

4.3 Results

Several wildlife species known to occur in or in the vicinity of the study area are protected under Federal and/or State endangered species laws or have been designated as species of special concern by CDFW. **Figure 4-1** provides a map of CNDDB special-status species occurrences within five miles of the study area, and **Table 4-1** provides a comprehensive list of special-status wildlife species that were considered in the analysis and their potential to occur in the study area.



SOURCE: MAXAR, 2021; NOAA, 2021; CDFW, 2022; KSN, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 4-1
Special Status Species occurrences within the Project Area

ESA

The analysis below includes consideration of special status species categorized as present, or with a medium or high potential to occur. Each species on the list was assessed individually based on its habitat requirements and distribution relative to the location and vegetation communities that occur in and around the study area. Those species with a moderate or high potential to occur in the study area are described below in greater detail. If habitat was not present or the study area is outside of the known range of the species, the species was assumed absent and excluded from the list.

TABLE 4-1
SPECIAL STATUS WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur in Study Area
Invertebrates			
Crotch bumble bee *Bombus crotchii*	--/--	Inhabits open grassland and scrub habitats, nesting occurs underground.	Low. The Central Valley has been modified and fragmented by agricultural and urban development and native grasslands and scrub are no longer abundant. The crotch bumble bee has been largely extirpated from the region.
Western bumble bee *Bombus occidentalis*	--/--	Shrubland, grassland, and open grassy urban areas, nesting typically occurs underground and in cavities.	Low. Although there are two CNDDB occurrences in the vicinity of the study area, they were recorded in 1962. In California, Western bumble bee populations are now largely restricted to high elevation sites in the Sierra Nevada and scattered observations along the California coast.
Monarch butterfly *Danaus plexippus*	FC/--	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico in wind-protected tree groves with nectar and water sources nearby. Milkweed (*Asclepias sp*) is host plant.	Moderate. The study area is in the migration range and provides potential suitable habitat.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT/--	Occurs in the Central Valley where mature elderberry shrubs occur.	High. The study area is in the range of the species and elderberry shrubs were documented in the study area.
Amphibians			
California tiger salamander *Ambystoma californiense*	FT/CT	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Low. Although within the range of the species, the study area does not have suitable habitat. Waterways within the study area contain predators and/or are in highly managed agricultural areas with inconsistent water regimes.
Reptiles			
Northern California legless lizard *Anniella pulchra*	--/CSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential.	Low. Although the study area is within the historic range, this species has not been documented north of the Stanislaus River in the Central Valley since 1933.

TABLE 4-1 (CONTINUED)
SPECIAL STATUS WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur in Study Area
Western pond turtle *Emys marmorata*	--/CSC	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	High. The study area is in the range. Wetlands and the margins of aquatic habitats may provide potential habitat.
San Joaquin coachwhip *Masticophis flagellum ruddocki*	--/CSC	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley.	Low**.** Project occurs outside of the known range identified by USFWS.
Giant garter snake *Thamnophis gigas*	FT/CT	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the garter snakes in California.	Low. Although the northern tip and southern tip of the study area are in the USFWS GGS historic range, there are no documented GGS sightings between Stockton and Merced since the late 1800s. The closest current CNNDB record is from 2018 and is 7.5 miles to the northwest of the study area.
Western spadefoot	--/CSC	Occurs primarily in grassland habitats. Vernal pools are essential for breeding and egg-laying.	Low. The most recent CNDDB record is from 1922 and the study area no longer has suitable habitat. Species is possibly extirpated from this area.
Birds			
Tricolored blackbird *Agelaius tricolor*	--/CT	High colonial species, requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Low. There are historic CNNDB occurrences in the study area; however, the study area has been modified and fragmented by agricultural and urban development and the remining habitat is likely too small to support a breeding population.
Short-eared owl *Asio flammeus*	--/CSC	Utilizes densely vegetated grasslands and emergent wetlands with abundant prey (e.g., voles, other small mammals, birds, reptiles, amphibians, and arthropods) in the Delta as wintering grounds. It has been known to occasionally nest in Northern California.	Low. The study area does not have suitable nesting habitat. However, these owls may overwinter in the study area.
Burrowing owl *Athene cunicularia*	--/CSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	High. The study area is in the range and provides potential habitat.
Swainson's hawk *Buteo swainsoni*	--/CT	Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	High. The study area is in the range and provides habitat for nesting and foraging.
Northern harrier	--/CSC	Coastal scrub, Great Basin grassland, marsh and swamp, riparian scrub, valley	High. The study area is in the range and provides habitat for

TABLE 4-1 (CONTINUED)
SPECIAL STATUS WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur in Study Area
Circus hudsonius		and foothill grassland, and wetlands. Coastal salt and fresh-water marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	nesting and foraging.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT/CE	Found in cottonwood-willow forest and willow scrub along rivers and streams.	Low. The study area is in the range, but riparian habitat is narrow and fragmented and is unlikely to support cuckoos.
White-tailed kite *Elanus leucurus*	--/CFP	Cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetlands. Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	High. The study area is in the range and provides habitat for nesting and foraging.
Lesser sandhill crane *Grus canadensis*	--/CSC	Annual and perennial grassland habitats, pastures, moist croplands with rice or corn stubble, and open, emergent wetlands.	Low. The study area does not have suitable roosting habitat.
Greater sandhill crane *Grus canadensis tabida*	--/CT,CFP	Annual and perennial grassland habitats, pastures, moist croplands with rice or corn stubble, and open, emergent wetlands. Typically nests in mounds of wetland plants or hummocks in remote portions of extensive wetlands. Sometimes nests in grass-lined depressions on dry sites.	Low. The study area does not have suitable roosting habitat.
Yellow-breasted chat *Icteria virens*	--/CSC	Nesting habitat includes early seral stage riparian thickets of willows, vine tangles, and dense brush with an open canopy above.	Low. May use the study area during migration. Chats do not nest in the Central Valley.
California black rail *Laterallus jamaicensis coturniculus*	--/CT,CFP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Low. Outside of the current known range and study area lacks suitable habitat.
Loggerhead shrike *Lanius ludovicianus*	--/CSC	Forages and nests in grasslands, shrublands, and open woodlands. Nests in trees and shrubs.	Moderate. The study area is in range and may provide potential habitat.
Modesto song sparrow *Melospiza melodia*	--/CSC	Nests and forages primarily in emergent marsh, riparian scrub, and early successional riparian forest habitats in the north-central portion of the Central Valley; infrequently in mature riparian forest and sparsely vegetated ditches and levees. Forages primarily on exposed ground or in leaf litter.	Low. Study area provides marginal habitat. Historically, they were documented near the study area, but the current range is west and north of the study area.
Least Bell's vireo *Vireo bellii pusillus*	FE/CE	Nesting habitat includes willows, mulefat, California wild rose, poison-oak, mugwort, and cottonwood.	Low. Study area is outside of the known range identified by USFWS.

TABLE 4-1 (CONTINUED)
SPECIAL STATUS WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur in Study Area
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	--/CSC	Nests in freshwater wetlands with dense, emergent vegetation.	Low. May use the study area during migration, but do not nest in the Central Valley.
Mammals			
Pallid bat *Antrozous pallidus*	--/CSC	Roosts in crevices in rocky outcrops; caves; mines; trees (including bole cavities of oaks, exfoliating ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards); and various human structures, such as bridges, barns, and vacant buildings.	Moderate. The study area is in range and may provide potential habitat.
western red bat *Lasiurus blossevillii*	--/CSC	Associated with riparian habitat. Roosts primarily in the foliage of trees or shrubs, but may also occasionally use caves. Day roosts commonly in edge habitats.	Moderate. This species may roost in the denser patches or riparian habitat in the proposed project area; however, roosting is not reported by the CNDDB within the nine-quadrangle area that includes the proposed project area.
Riparian (= San Joaquin Valley) woodrat *Neotoma fuscipes riparia*	FE/CSC	Forest habitats with moderate canopy and moderate to dense understory. Commonly found in chaparral and redwood habitats.	Low. Study area is outside of the known range identified by USFWS.
Riparian brush rabbit *Sylvilagus bachmani riparius*	FE/CE	Riparian areas on the San Joaquin River in dense thickets of wild rose, willows, and blackberries.	High. The study area is in range and some areas of denser riparian habitat (forested wetland) may provide suitable habitat.
American Badger *Taxidea taxus*	--/CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Low. The study area is narrow and fragmented by agricultural and urban development and does not have suitable habitat.
San Joaquin kit fox *Vulpes macrotis mutica*	FE/CT	Annual grasslands or grassy open areas with scattered shrubby vegetation. Requires loose-textured sandy soils for burrowing and suitable prey base.	Low. The study area does not have suitable habitat and no known extant populations in the project vicinity.

NOTES:
CNDDB = California Natural Diversity Database

Federal
FC: Federal candidate for listing
FE: Federally listed as endangered
FT: Federally listed as threatened
FD: Federally delisted

State
CE: State listed as endangered
CT: State listed as threatened
CD: State delisted
CP: State proposed for listing

State
FP: California fully protected species
CSC: California species of special concern

SOURCES: CDFW, 2019, 2022; USFWS, 2022

4.3.1 Federally Listed and State-Listed Wildlife Species

4.3.1.1 Monarch Butterfly

The monarch butterfly is a federal candidate species and not yet listed or proposed for listing under the Endangered Species Act. In the western U.S., monarch butterflies migrate in the fall and overwinter at sites along the Pacific coast and Central Valley. Monarch's host plant, milkweed (*Asclepias* spp.), and other flowering plants are necessary for monarch butterfly habitat-adult monarchs feed on the nectar of many flowering plants during breeding and migration, but they can only lay eggs on milkweed plants (USFWS 2022d). The study area lies in the migration route of monarch butterflies, and if nectar sources and milkweed are present, individuals may occur.

4.3.1.2 Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle (VELB) is listed as threatened and critical habitat was designated on August 8, 1980. Suitable habitat for the VELB is typically defined as live elderberry (*Sambucus* spp.) stems measuring at least one inch in diameter at ground level below 500 feet in elevation (USFWS 2017a). VELB's range extends from Shasta County to Fresno County.

VELB is completely dependent on its host plant, the elderberry, which is a common component of the riparian forests and adjacent upland habitats of California's Central Valley and foothills. Live stems support the life cycle of the beetle for both food and cover. Elderberry shrubs are generally found along waterways and in floodplains that support remnant stands of riparian vegetation that are not inundated for long periods of time (Talley 2006). Although VELB occurs in both riparian and upland woodland and scrub habitats, VELB occupancy tends to be higher in riparian areas versus upland elderberry locations (USFWS 2017a). In addition to VELB's dependency on elderberry shrubs, they also rely on the surrounding riparian and upland habitat to disperse between shrubs. Thus, contiguous intact riparian systems are essential to dispersal and migration of VELB and are the essential habitat for VELB (USFWS 2017a).

Because VELB have limited flight range, they are reliant on contiguous habitat. Fragmentation of habitat leads to loss of subpopulations and decreases the likelihood of colonization of unoccupied habitats. The average distance between shrubs with exit holes is 65–165 feet with up to a half mile between occupied clumps. In managed areas, such as rivers with a levee system and modified floodplain, the USFWS considers riparian habitat and upland woodland and scrub habitat as associated elderberry habitat if it occurs in the floodplain of the waterway (USFWS 2017a). Although upland woodland and scrub require different hydrologic regimes, they provide similar connectivity to other riparian habitat in these manipulated systems and are believed to maintain connectivity between occupied and unoccupied habitats. Several elderberry shrubs were documented on site, but no exit holes were located during the surveys. However, there is still potential for VELB to occur. Please refer to Chapter 5 for additional information on VELB surveys.

4.3.1.3 Swainson's Hawk

Swainson's hawk once occupied large grassland and shrub steppe habitats, as well as canyons, foothills, and smaller interior valleys in otherwise mountainous regions. Currently, the species is most common in the Central Valley and Great Basin. Nesting habitat for Swainson's hawk includes mature trees with relatively dense canopies such as oaks or cottonwoods in or near riparian habitat, agricultural fields, or suburban neighborhoods near suitable foraging habitat. Individuals forage in grasslands, irrigated pastures, and grain fields. In California, Swainson's hawks begin nesting in late March, and the young usually leave the nest (fledge) by August. The large trees within the riparian corridor and adjacent properties could provide nesting sites and annual grasslands and nearby agricultural fields provide suitable foraging habitat, and several occurrences of Swainson's hawk have been recorded near the study area.

4.3.1.4 Riparian Brush Rabbit

In 1986, after surveys along rivers within its historical range indicated that there was only a single, small extant population in Caswell Memorial State Park (Williams and Basey 1986), the riparian brush rabbit was designated as a "Mammalian Species of Special Concern" by the CDFG's Wildlife Management Division and was later listed as a state and federal endangered species. Habitat consists of riparian areas that contain willow thickets, California wild rose (*Rosa californica*), Pacific blackberry (*Rubus vitifolius*), California wild grape (*Vitis californica*), coyote bush (*Baccharis douglasii*) and various grasses. The rabbits have small home ranges that are limited by the size of available brushy habitat (USFWS 2020).

There is a known population of riparian brush rabbit adjacent to the study area at the Center for Natural Lands Management (CNLM) owned Oxbow Preserve on the east side of the San Joaquin River, 2 miles southwest of Lathrop. This property contains approximately 30 acres of riparian forest dominated by Fremont cottonwood, valley oak, wild rose, blackberry, and annual grasses with sandbar willow, stinging nettle, and blessed milk thistle (*Silybum marianum*). CNLM has controlled propagation and ongoing detection activities of the riparian brush rabbit individuals.

4.3.2 Non-listed Special Status Wildlife Species

4.3.2.1 Western Pond Turtle

The western pond turtle is a California species of special concern. This moderate-sized aquatic turtle is commonly found in ponds, lakes, marshes, rivers, streams, and irrigation ditches with rocky or muddy substrates. Its habitat often exhibits shoreline basking areas that may or may not be bordered by aquatic vegetation. Aquatic sites are often within woodlands, grasslands, and open forests, between sea level and 6,000 feet in elevation. Pond turtles bask on logs or other objects when water temperatures are lower than air temperatures. Their nests are created in upland areas with friable soils, often up to 0.25 miles from an aquatic site (Jennings and Hayes 1994; Stebbins, 2003; Zeiner et al. 1988–1990).

Western pond turtles are discontinuously distributed throughout California west of the Cascade-Sierran crest (Jennings and Hayes 1994). They were last documented near the study area on April

16, 2005, approximately 7.7 miles west of the study area (CDFW 2022a). Suitable habitat occurs in the study area at French Camp Slough, Weatherbee Lake, and within emergent wetlands.

4.3.2.2 Western Burrowing Owl

Western burrowing owls are California species of special concern. They inhabit grassland, desert, and open shrub habitats throughout the state from sea level to approximately 5,300 feet (Zeiner et al. 1988–1990). Unlike many sensitive species, burrowing owls persist and even thrive in some landscapes that are highly altered by human activity. The characteristics of suitable habitat are burrows for roosting and nesting, and relatively short vegetation with only sparse shrubs and taller vegetation. Individuals in agricultural environments nest along roadsides and water conveyance structures. Breeding occurs February through August (Haug et al. 1993; Thomsen 1971).

Burrowing owls have a high potential to occur in the study area due to their preference of habitat in disturbed and agricultural lands. Occurrences as close as 1.5 miles from the study area have been documented on disturbed and ruderal land (CDFW 2022a).

4.3.2.3 Northern Harrier

Northern Harrier is a California species of special concern, primarily due to loss or degradation of breeding habitat. They inhabit coastal salt and freshwater marshes, and nest and forage in grasslands and are less commonly found in the Central Valley. Northern Harrier can be locally abundant where suitable habitat remains free of disturbance, especially from intensive agriculture. Nest could occur within study area in more open areas of riparian forest and emergent wetland, but there are no recorded occurrences of this species within the study area.

4.3.2.4 White-Tailed Kite

The white-tailed kite is a fully protected species under the California Fish and Game Code. This species nests primarily in riparian and lowland habitats often associated with agricultural areas throughout cismontane California. White-tailed kites typically nest in dense vegetation at the tops of oaks, willows, or other native trees. They prey primarily on voles and other diurnal mammals. Their numbers and range have increased in the past few decades (Zeiner et al. 1988–1990).

The study area provides trees suitable for nesting and potential foraging habitat is available along the levees and in nearby agricultural fields and open grasslands. The most recent documented occurrence was an observation of one adult at a nest in April 2008, 12 miles north of the study area 2 miles south of highway 12 (CDFW 2022a). This species is typically underreported in CNDDB.

4.3.2.5 Loggerhead shrike

The loggerhead shrike is a California species of special concern. They inhabit woodlands, savannah, and riparian woodlands. This species prefers open habitats with scattered shrubs, trees, posts, fences, utility lines or other perches. Loggerhead shrike prefer fairly dense shrubs and

brush for nesting and are rarely found in heavily urbanized areas but often found in open cropland (Zeiner et al. 1988–1990). The study area contains marginal habitat for loggerhead shrike. The only recorded occurrence of this species near the study area is of a pair of adults feeding 4 fledglings approximately 1 mile east of the study area near the junction of highways 5 and 120 in 2016 (CDFW 2022a).

4.3.2.6 Other Breeding and Migratory Birds

The Federal Migratory Bird Treaty Act and California Fish and Game Code protect raptors, most native migratory birds, and breeding birds that could be present in the study area. The study area provides nesting opportunities for a variety of resident and migratory birds. Common raptor species that may nest in the mature trees of the study area could include red-tailed hawk, red-shouldered hawk, coopers hawk, and great horned owl. Wading birds such as the great egret, and the great blue heron are known to nest upstream and downstream of the study area. Among the many bird species observed in the study area with the potential to nest are western scrub jay, American crow, Canada goose, and gulls.

4.3.2.7 Pallid Bat

The pallid bat, a California species of special concern, occurs throughout California except in parts of the high Sierra and the northwestern corner of the state (Zeiner et al. 1988–1990). The pallid bat inhabits a variety of habitats, such as grasslands, shrublands, woodlands, and forests; however, it is most abundant in open, dry habitats with rocky areas for roosting. Pallid bats roost alone, in small groups, or gregariously. Roosts include caves, crevices in rocky outcrops and cliffs, mines, trees, and various manmade structures (e.g., bridges, barns, porches); they generally have unobstructed entrances/exits and are high above the ground, warm, and inaccessible to terrestrial predators. Year-to-year and night-to-night roost reuse is common; however, bats may switch day roosts on a daily and seasonal basis (Sherwin and Rambaldini 2005).

The pallid bat is common throughout the lower elevations in California. One occurrence was reported in 1951 near Farmington, but the exact location is unknown. The bridges in the study area may provide suitable roosting habitat for this species.

4.3.2.8 Western Red Bat

The western red bat is a California species of special concern. This is a riparian obligate species (i.e., a species dependent on riparian habitat) that is ubiquitous throughout California except in the northern Great Basin region. Western red bats roost individually in dense clumps of tree foliage in riparian areas, orchards, and suburban areas. Individuals have been observed foraging around streetlamps and floodlights in suburban areas.[1]

[1] Western Bat Working Group. 2005. Western Bat Working Group Species Accounts for all Bats. Available: http://www.wbwg.org/speciesinfo/species_accounts/allbats.pdf.

Based on its tendency to roost within tree foliage, this species may be intermittently present in the riparian and woodland habitat in the Project Area. However, roosting occurrences are not reported by the CNDDB within 5 miles of the Project Area or in the nine-quadrangle area that includes the Project Area.

4.3.2.9 Critical Habitat for Listed Wildlife Species

USFWS defines the term “critical habitat” in the Federal Endangered Species Act as a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The study area is not within designated critical habitat for any listed terrestrial wildlife species (USFWS 2022a).

4.4 Summary

No special status-species were observed during reconnaissance level surveys. However, based on the habitats identified in the study area and available data, there is the potential for four federally and state-listed species and eight non-listed species of special concern to occur within the study area.

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CHAPTER 5
Valley Elderberry Longhorn Beetle Habitat

5.1 Purpose

This chapter documents the suitability of the study area to support the valley elderberry longhorn beetle and the results of a protocol-level survey for elderberry shrubs.

The blue elderberry (*Sambucus nigra* ssp. *caerulea*) is the sole host plant of the federally listed threatened VELB. This chapter presents the methods and results of surveys conducted for elderberry shrubs in the Mossdale Tract study area. Elderberry shrubs and associated riparian VELB habitat may be impacted by the construction of the flood risk reduction and multi-benefit components of the proposed project. The mapped location of elderberry shrubs and associated VELB habitat will be used to avoid habitat where feasible or to assess impacts from flood risk reduction and multi-benefit projects to VELB habitat.

5.2 Methods

ESA Biologist/Botanist Chuck Hughes conducted field surveys in 2022 on June 6, 7, 15, and 29, and September 1 and 29. ESA Biologist Aaron Lopez assisted on June 6, 7, and 15. ESA Biologist Zach Leisz assisted on June 29 and September 1. The surveys were conducted to locate and document elderberry shrubs in the study area.

Elderberry shrubs were surveyed during June and September 2022 within the construction alignment and 150-foot buffer. Surveys were performed in accordance with methods described in the USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (USFWS 2017).

5.2.1 Elderberry Shrub Points

Submeter accuracy global positioning system (GPS) point locations and data were taken for elderberry shrubs with stems greater than one inch in diameter measured at ground level. One GPS point was taken for distinguishable shrubs. Visual estimates of shrub height and maximum diameter (canopy) were recorded. All shrubs that occurred between the levees were categorized as occurring within riparian habitat. If shrubs occurred outside the levee on the land side, the surrounding habitat was assessed to determine if the shrubs occurred in riparian or upland habitat.

Elderberry shrub stems were carefully inspected for VELB exit holes. Holes were presumed to be produced by the VELB if they were the appropriate size and shape (i.e., 7−10 mm wide and oval

to cylindrical in shape; **Figure 5-1**). Presence and age (new or old) of VELB holes was documented. Notes were taken if shrubs were damaged, in poor condition, previously tagged, contained a bird nest, or were partially inaccessible such that the entire shrub could not be surveyed for VELB exit holes.

5.2.2 Inaccessible Clumps

There were instances where elderberry shrubs were inaccessible due to encroaching California blackberry (*Rubus ursinus*), California wild grape, wild rose, or Himalayan blackberry. There were also cases where shrubs were located within or adjacent to homeless encampments which impeded accessing the shrubs to conduct exit hole counts. When shrubs were inaccessible, polygons that included the location of the elderberry shrubs were hand drawn on a tablet with aerial imagery in the field and informed by the surveyor's GPS location (estimated shrubs are designated as "inaccessible clumps"). Count estimates were based on the number of visible fruit clusters, or flower umbels, in close proximity to each other (**Figure 5-2**). In areas where the shrubs could be observed from a distance, but not accessed due to homeless encampments, data points were taken using an off-set feature and as much information as possible was recorded. This typically included the number of shrubs, height, width, and any other pertinent data that could be gathered.



SOURCE: ESA 2018

Figure 5-1
Valley Elderberry Longhorn Beetle
(*Desmocerus californicus dimorphus*) Exit Holes



SOURCE: ESA 2018

Figure 5-2
Elderberry Flower Umbels, Leaves, and Berries Protruding Through Vines Used to Identify Inaccessible Clumps.

5.2.3 Elderberry Shrub Clusters

Based on a GPS location taken at the center of a shrub and using half the greatest width of the shrub as the radius, the approximate dripline of each shrub was represented as a circle. Overlapping shrubs (circles) were merged.

5.3 Results

Based on the field survey, a GIS database was created that included elderberry shrub points, elderberry cluster polygons, elderberry inaccessible clump polygons, and all information regarding presence or absence of exit holes. Canopy polygons were placed around each shrub to identify the area of the elderberry shrub.

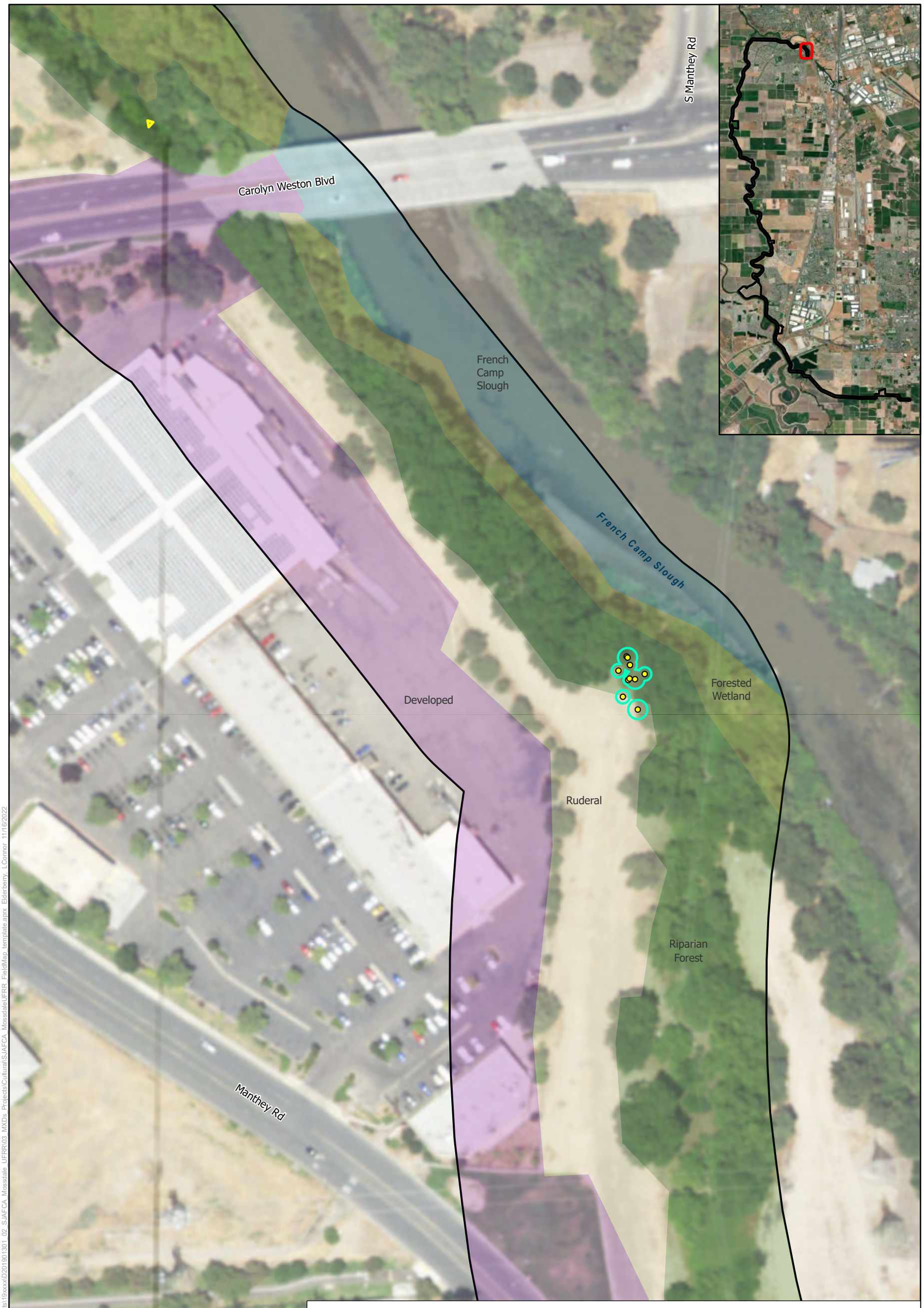
The numbers of elderberry clusters and inaccessible clumps found in each surveyed segment are shown in **Table 5-1 and shown in Figure 5-3**.

TABLE 5-1
ELDERBERRY CLUSTERS AND CLUMPS IN SURVEYED SUBREACH 1, 3, AND 4 SEGMENTS

	Elderberry Clusters		Inaccessible Elderberry Clumps	
River Mile #	Number of Shrubs	Area (square feet)	Number	Area (square feet)
RM 43	58	10,180	7	21,157.0
RM 45	0	0	1	502.7
RM 47	0	0	2	1,298.0
RM 49	0	0	3	1,384.3
RM 50	5	3,336	1	5,197.7
RM 51	11	5,498	1	2,462.3
RM 52	8	1,407	1	294.6
RM 53	2	767	1	156.9
RM 54	2	1,615	0	0.0
Total	**86**	**22,803**	**17**	**32,454.0**

5.4 Summary

No VELB were observed during reconnaissance level surveys. However, 86 elderberry shrubs and 17 inaccessible clumps were identified in the study area. These shrubs have the potential to support VELB.

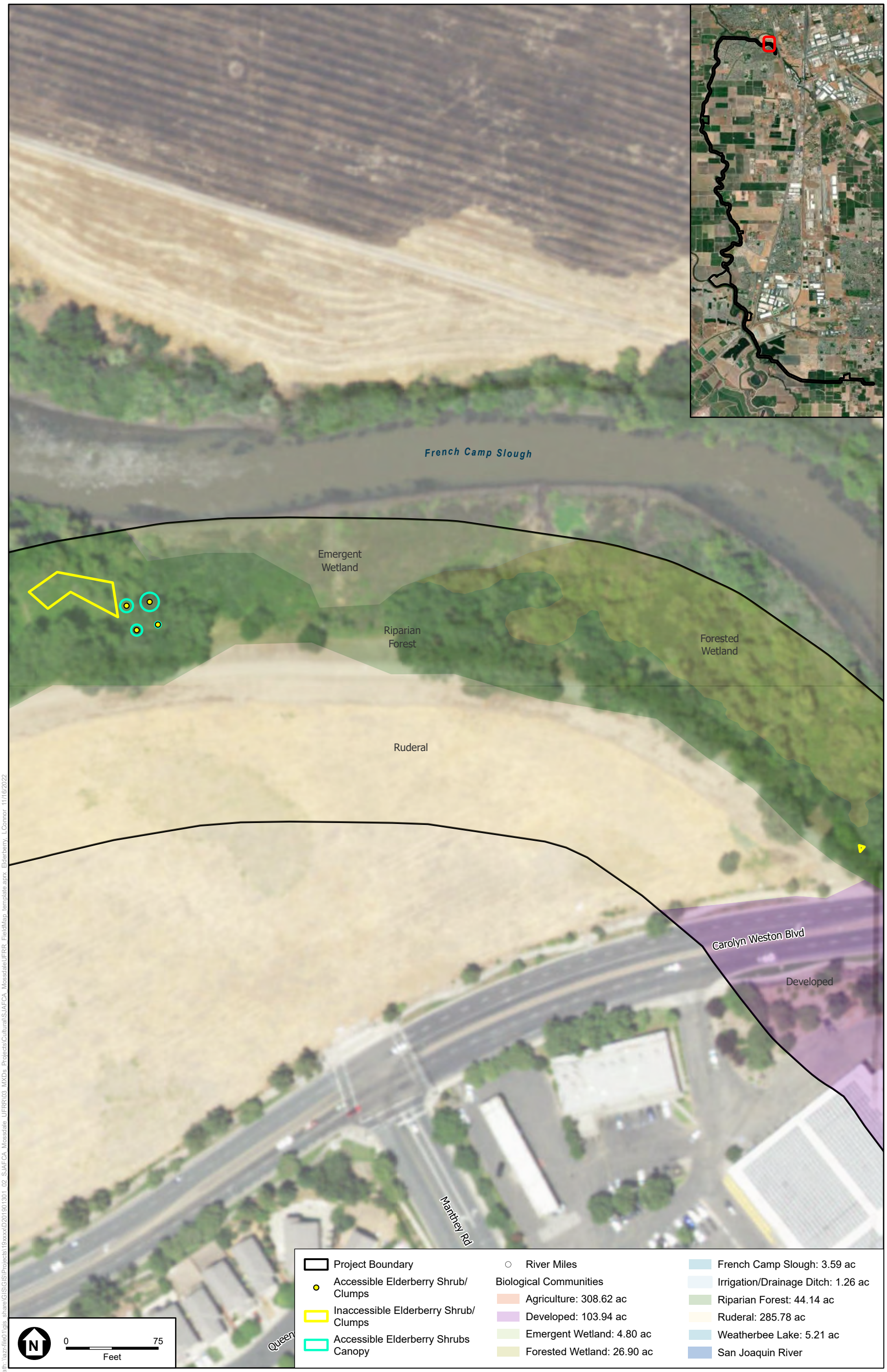


SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 a
Elderberry Shrubs

ESA



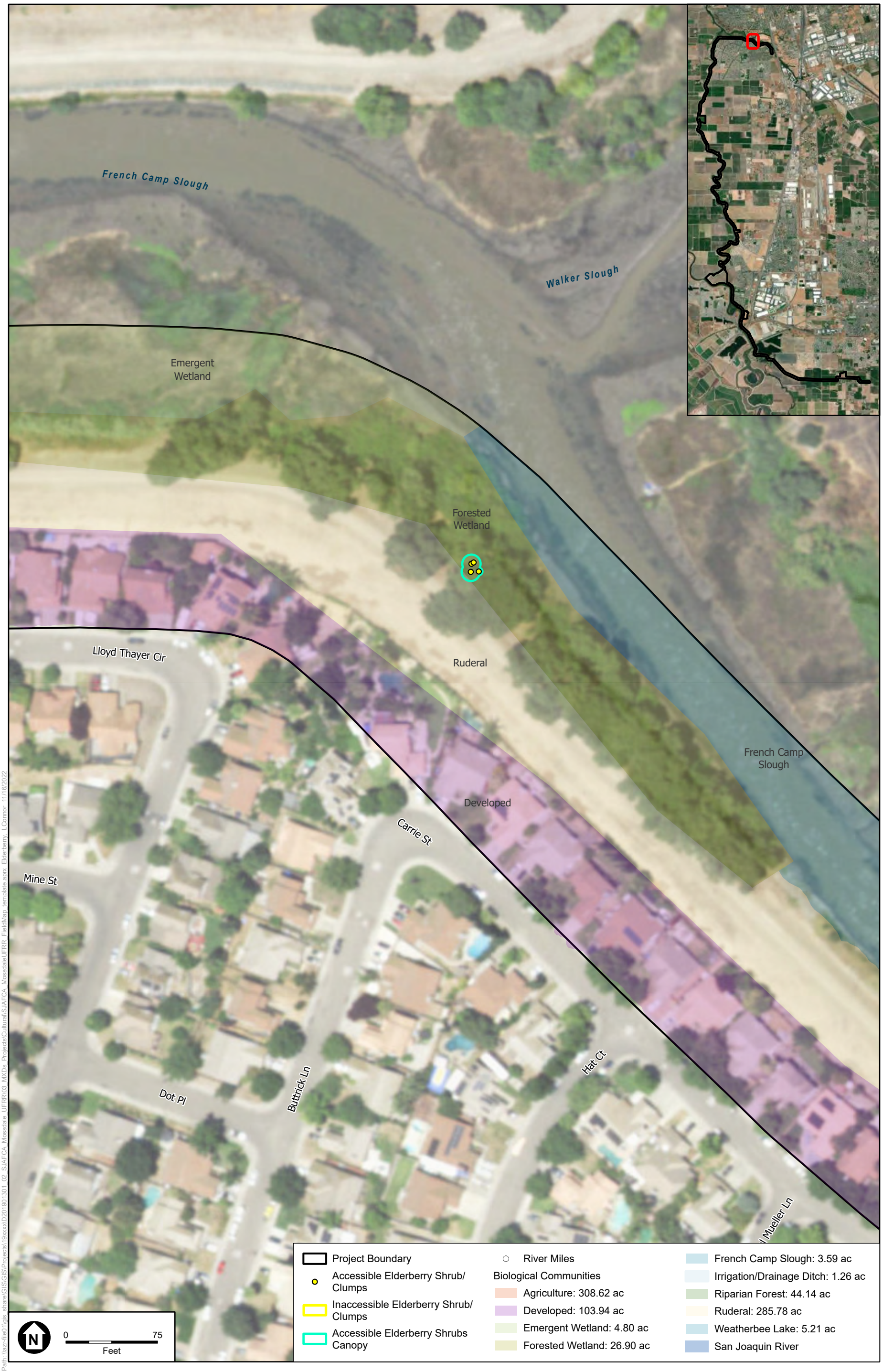
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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 b
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 c
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 d
Elderberry Shrubs

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 e
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 f
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 g
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 h
Elderberry Shrubs

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 5-3 i
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 5-3 j
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 k
Elderberry Shrubs

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 5-3 l
Elderberry Shrubs

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 5-3 m
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 n
Elderberry Shrubs

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 5-3 o
Elderberry Shrubs

ESA



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SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 p
Elderberry Shrubs

ESA



Path: \\azr-file01\dis_share\GIS\GIS\Projects\19xxxxID2019013301_02_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Cultural\SJAFCA_MossdaleUFRR_FieldMap_template.aprx Elderberry, LConnor 11/16/2022

SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 5-3 q
Elderberry Shrubs

ESA

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CHAPTER 6
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Appendix A
Soil Resources Report

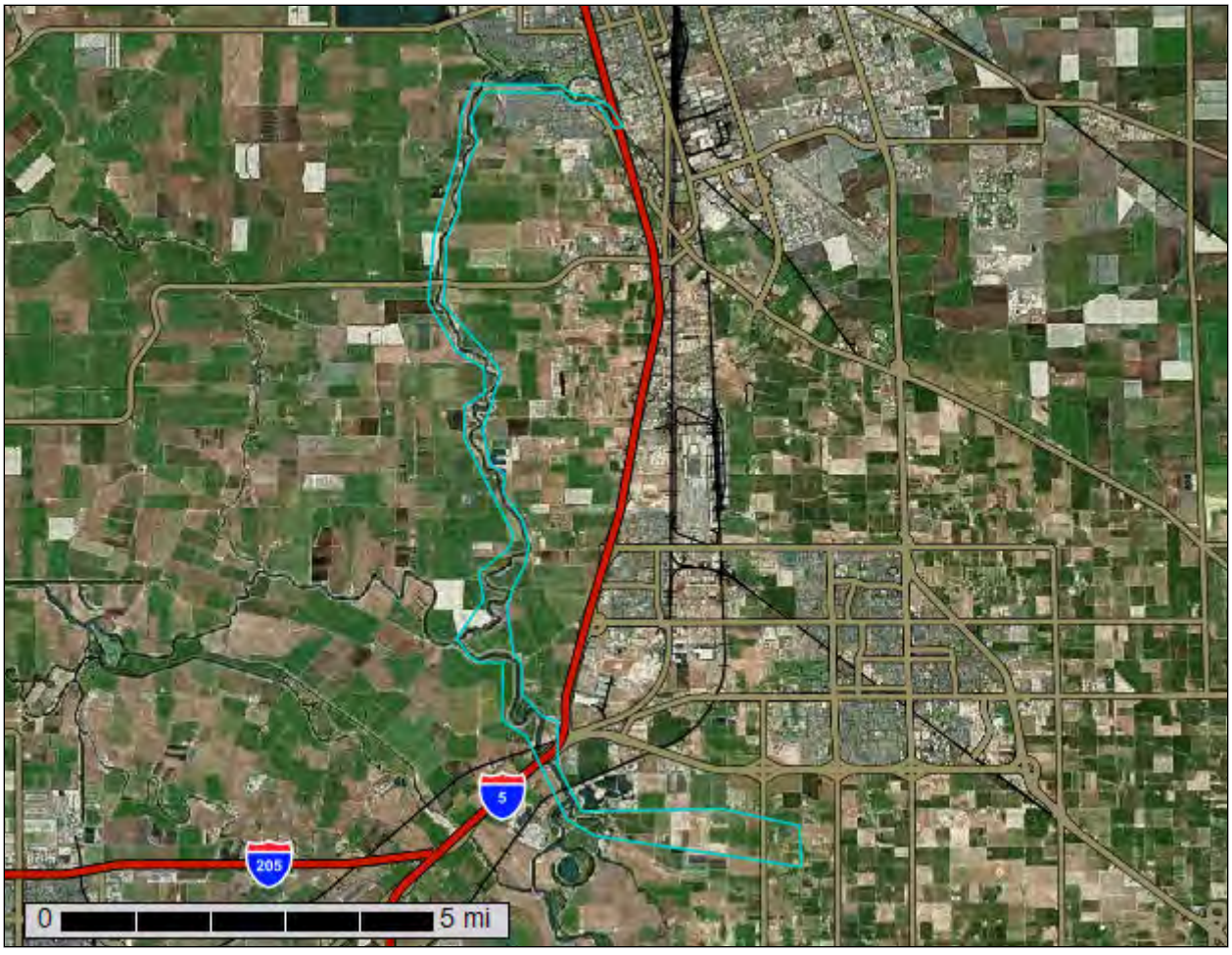
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for San Joaquin County, California



September 28, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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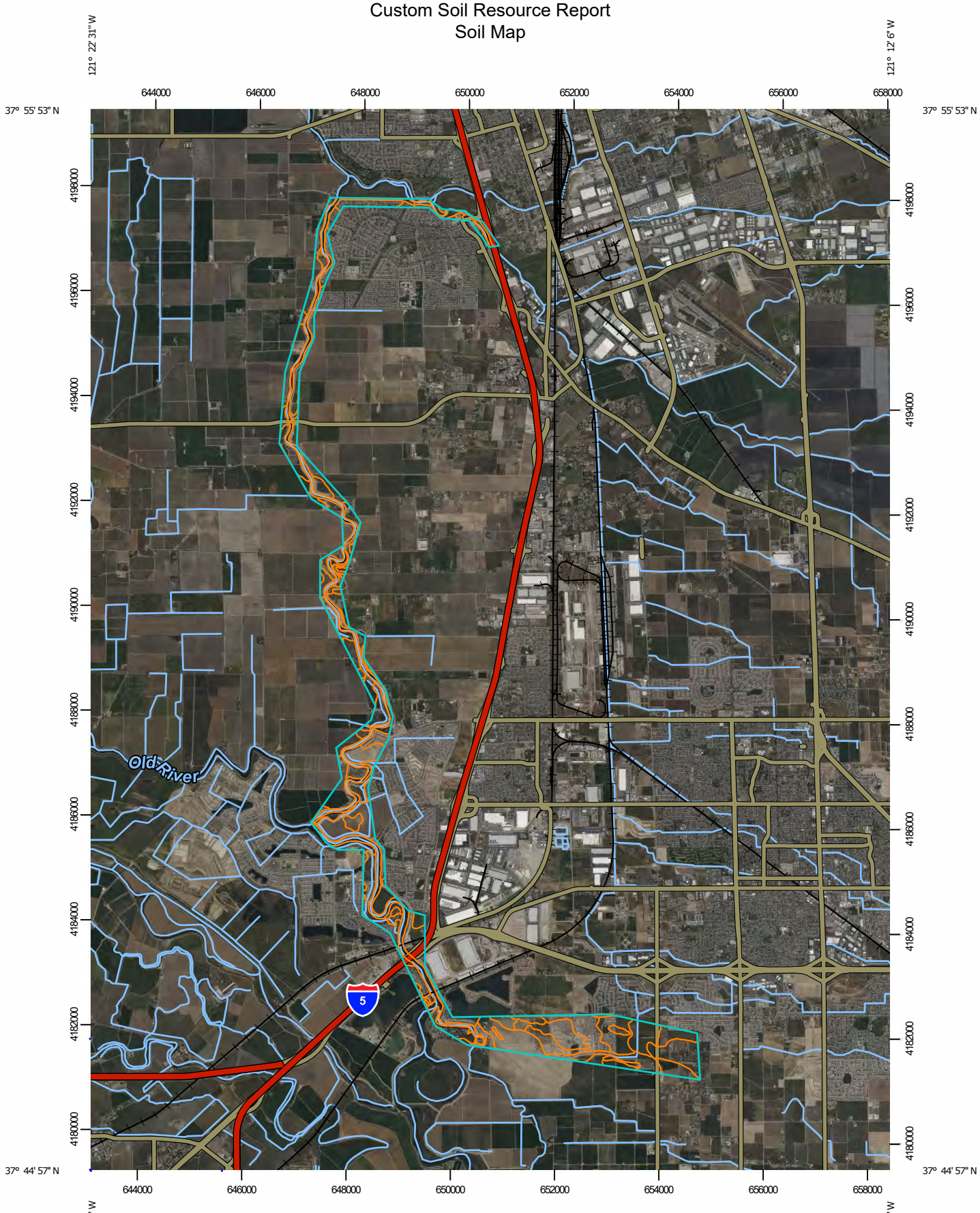
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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Joaquin County, California
Survey Area Data: Version 15, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 9, 2022—Mar 11, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
108	Arents, saline-sodic, 0 to 2 percent slopes	3.9	0.1%
109	Bisgani loamy coarse sand, partially drained, 0 to 2 percent slopes	72.9	2.5%
110	Boggiano clay loam, 0 to 2 percent slopes	5.4	0.2%
130	Columbia fine sandy loam, drained, 0 to 2 percent slopes, MLRA 17	275.5	9.6%
131	Columbia fine sandy loam, partially drained, 0 to 2 percent slopes, occasionally flooded	38.8	1.4%
132	Columbia fine sandy loam, channeled, partially drained, 0 to 2 percent slopes, frequently flooded	43.2	1.5%
133	Columbia fine sandy loam, clayey substratum, partially drained, 0 to 2 percent slopes	98.0	3.4%
142	Delhi loamy sand, 0 to 2 percent slopes, MLRA 17	88.0	3.1%
144	Dello sand, partially drained, 0 to 2 percent slopes, occasionally flooded	72.3	2.5%
145	Dello loamy sand, drained, 0 to 2 percent slopes	190.0	6.6%
146	Dello loamy sand, partially drained, 0 to 2 percent slopes	4.5	0.2%
147	Dello sandy loam, clayey substratum, drained, 0 to 2 percent slopes	2.7	0.1%
148	Dello clay loam, drained, 0 to 2 percent slopes, overwashed	59.8	2.1%
150	Dumps	2.1	0.1%
152	Egbert mucky clay loam, partially drained, 0 to 2 percent slopes	0.1	0.0%
153	Egbert silty clay loam, partially drained, 0 to 2 percent slopes, MLRA 16	149.8	5.2%
154	Egbert silty clay loam, sandy substratum, partially drained, 0 to 2 percent slopes, MLRA 16	19.9	0.7%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
159	Fluvaquents, 0 to 2 percent slopes, frequently flooded, MLRA 16	5.2	0.2%
160	Galt clay, 0 to 1 percent slopes, MLRA 17	83.7	2.9%
166	Grangeville fine sandy loam, partially drained, 0 to 2 percent slopes	154.7	5.4%
167	Grangeville clay loam, partially drained, 0 to 2 percent slopes	42.2	1.5%
169	Guard clay loam, drained, 0 to 2 percent slopes	22.8	0.8%
181	Jacktone-Urban land complex, 0 to 2 percent slopes	8.5	0.3%
196	Manteca fine sandy loam, 0 to 2 percent slopes	5.4	0.2%
197	Merritt silty clay loam, partially drained, 0 to 2 percent slopes	485.0	16.9%
198	Merritt silty clay loam, partially drained, 0 to 2 percent slopes, occasionally flooded	36.7	1.3%
201	Nord loam, 0 to 2 percent slopes	0.4	0.0%
243	Scribner clay loam, partially drained, 0 to 2 percent slopes, MLRA 16	67.6	2.4%
255	Tinnin loamy coarse sand, 0 to 2 percent slopes	195.1	6.8%
261	Valdez silt loam, organic substratum, partially drained, 0 to 2 percent slopes, MLRA 16	103.0	3.6%
266	Veritas fine sandy loam, 0 to 2 percent slopes	110.4	3.8%
W	Water	425.3	14.8%
Totals for Area of Interest		**2,873.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some

observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The

pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Joaquin County, California

108—Arents, saline-sodic, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhr7
Elevation: 20 to 30 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 260 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Arents and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arents

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock sources

Typical profile

A - 0 to 10 inches: sandy loam
B/C - 10 to 40 inches: clay loam
Ckq - 40 to 50 inches: cemented
C - 50 to 60 inches: stratified sandy loam to loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 30 to 50 inches to duripan
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 85.0
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Manteca
Percent of map unit: 5 percent
Hydric soil rating: No

Bisgani
Percent of map unit: 4 percent
Landform: Alluvial fans
Hydric soil rating: Yes

Timor
Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, lack hardpan and salt
Percent of map unit: 2 percent
Hydric soil rating: No

109—Bisgani loamy coarse sand, partially drained, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: hhr8
Elevation: 20 to 40 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 260 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Bisgani and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bisgani

Setting
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile
A - 0 to 11 inches: loamy coarse sand
C - 11 to 60 inches: coarse sand

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: Yes

Minor Components

Grangeville

Percent of map unit: 5 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Manteca

Percent of map unit: 4 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Veritas

Percent of map unit: 4 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Arents, stratified

Percent of map unit: 2 percent
Hydric soil rating: No

110—Boggiano clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhr9
Elevation: 40 to 50 feet
Mean annual precipitation: 16 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Boggiano and similar soils: 85 percent

Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boggiano

Setting

Landform: Fan terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock sources

Typical profile

A - 0 to 23 inches: clay loam
Bk - 23 to 48 inches: loam
Bkqm - 48 to 60 inches: indurated

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to duripan
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Cogna

Percent of map unit: 3 percent
Hydric soil rating: No

Vignolo

Percent of map unit: 3 percent
Hydric soil rating: No

Archerdale

Percent of map unit: 3 percent
Hydric soil rating: No

Stockton

Percent of map unit: 2 percent
Hydric soil rating: No

Columbia

Percent of map unit: 2 percent
Landform: Flood plains

Hydric soil rating: Yes

Hollenbeck

Percent of map unit: 2 percent
Hydric soil rating: No

130—Columbia fine sandy loam, drained, 0 to 2 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2xld1
Elevation: 10 to 130 feet
Mean annual precipitation: 14 to 19 inches
Mean annual air temperature: 61 to 62 degrees F
Frost-free period: 318 to 328 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Columbia and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Columbia

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 4 inches: fine sandy loam
A - 4 to 12 inches: fine sandy loam
C1 - 12 to 21 inches: silt loam
C2 - 21 to 26 inches: fine sandy loam
C3 - 26 to 34 inches: silt loam
C4 - 34 to 40 inches: loamy fine sand
C5 - 40 to 48 inches: fine sandy loam
C6 - 48 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 72 inches
Frequency of flooding: RareNone

Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: High (about 11.8 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R016XA002CA - Freshwater, Stratified, Fluventic Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Guard

Percent of map unit: 3 percent
Landform: Rims
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Cogna

Percent of map unit: 2 percent
Landform: Terraces, alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R018XI999CA - Miscellaneous - Cannot Be Correlated
Hydric soil rating: No

Grangeville

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Columbia, fine-textured overwash

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Merritt

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Dello

Percent of map unit: 2 percent

Landform: Flood plains on sloughs
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Egbert

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

131—Columbia fine sandy loam, partially drained, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: hhrz
Elevation: 10 to 100 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 230 to 340 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Columbia and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Columbia

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 12 inches: fine sandy loam
C - 12 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Merritt

Percent of map unit: 4 percent
Landform: Flood plains
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Dello

Percent of map unit: 4 percent
Landform: Flood plains
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Grangeville

Percent of map unit: 3 percent
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: No

Unnamed, buried substratum

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, sand surface layer

Percent of map unit: 2 percent
Hydric soil rating: No

132—Columbia fine sandy loam, channeled, partially drained, 0 to 2 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: hhs0
Elevation: 10 to 60 feet
Mean annual precipitation: 12 inches
Mean annual air temperature: 61 degrees F

Frost-free period: 230 to 340 days
Farmland classification: Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Columbia and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Columbia

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 12 inches: fine sandy loam
C - 12 to 60 inches: stratified sand to silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Merritt

Percent of map unit: 4 percent
Landform: Flood plains
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Unnamed, sand surface layer

Percent of map unit: 4 percent
Hydric soil rating: No

Dello

Percent of map unit: 4 percent
Landform: Flood plains

Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Unnamed, buried substratum
Percent of map unit: 3 percent
Hydric soil rating: No

133—Columbia fine sandy loam, clayey substratum, partially drained, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: hhs1
Elevation: 10 to 20 feet
Mean annual precipitation: 12 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 320 to 325 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Columbia and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Columbia

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile
A - 0 to 20 inches: fine sandy loam
C - 20 to 48 inches: sandy loam
C - 48 to 60 inches: clay

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Hydric soil rating: Yes

Minor Components

Grangeville

Percent of map unit: 4 percent
Hydric soil rating: No

Merritt

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Dello

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Unnamed, coarse texture below clayey sub.

Percent of map unit: 3 percent
Hydric soil rating: No

142—Delhi loamy sand, 0 to 2 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2ss9g
Elevation: 30 to 150 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 225 to 300 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Delhi

Setting

Landform: Alluvial fans, sand sheets, flood plains, dunes
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear, convex
Parent material: Alluvium derived from granite

Typical profile

Ap1 - 0 to 3 inches: loamy sand
Ap2 - 3 to 8 inches: loamy sand
A - 8 to 16 inches: loamy sand
C1 - 16 to 26 inches: loamy sand
C2 - 26 to 44 inches: sand
C3 - 44 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Tinnin

Percent of map unit: 5 percent
Hydric soil rating: No

Veritas

Percent of map unit: 5 percent
Hydric soil rating: No

Honcut

Percent of map unit: 5 percent
Hydric soil rating: No

144—Dello sand, partially drained, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: hhsd
Elevation: 0 to 30 feet
Mean annual precipitation: 12 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Dello and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dello

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 20 inches: sand
C - 20 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 36 to 48 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Fluaquents

Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: Yes

Columbia

Percent of map unit: 5 percent
Landform: Flood plains
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Unnamed, stratified substratum

Percent of map unit: 5 percent
Hydric soil rating: No

145—Dello loamy sand, drained, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhsf
Elevation: 0 to 30 feet
Mean annual precipitation: 12 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Dello and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dello

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 7 inches: loamy sand
C - 7 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Hydric soil rating: Yes

Minor Components

Egbert
Percent of map unit: 3 percent
Landform: Flood plains
Hydric soil rating: Yes

Unnamed, cemented substratum
Percent of map unit: 3 percent
Hydric soil rating: No

Columbia
Percent of map unit: 3 percent
Landform: Flood plains
Hydric soil rating: Yes

Merritt
Percent of map unit: 3 percent
Landform: Flood plains
Hydric soil rating: Yes

Unnamed, stratified substratum
Percent of map unit: 3 percent
Hydric soil rating: No

146—Dello loamy sand, partially drained, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: hhsg
Elevation: -10 to 10 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Dello and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dello

Setting
Landform: Flood plains, sloughs
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear, convex
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 10 inches: loamy sand
C - 10 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 36 to 48 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Merritt

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: Yes

Shima

Percent of map unit: 2 percent
Landform: Deltas
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Valdez

Percent of map unit: 2 percent
Landform: Flood plains
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Egbert

Percent of map unit: 2 percent
Landform: Flood plains
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Devries

Percent of map unit: 2 percent
Landform: Basin floors
Hydric soil rating: Yes

Piper

Percent of map unit: 2 percent
Landform: Levees
Ecological site: R016XA004CA - Island Sandhills (PROVISIONAL)
Hydric soil rating: Yes

Venice

Percent of map unit: 2 percent
Landform: Deltas
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Grangeville

Percent of map unit: 1 percent
Hydric soil rating: No

147—Dello sandy loam, clayey substratum, drained, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhsh
Elevation: 0 to 30 feet
Mean annual precipitation: 12 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Dello and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dello

Setting

Landform: Flood plains, sloughs
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear, convex
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 16 inches: sandy loam
C - 16 to 43 inches: loamy sand
2C - 43 to 60 inches: stratified clay loam to silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to abrupt textural change

Drainage class: Very poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Columbia

Percent of map unit: 5 percent
Landform: Flood plains
Ecological site: R016XA002CA - Freshwater, Stratified, Fluventic Sites (PROVISIONAL)
Hydric soil rating: Yes

Merritt

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Egbert

Percent of map unit: 4 percent
Landform: Flood plains
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Unnamed, mod coarse tex overwash

Percent of map unit: 2 percent
Hydric soil rating: No

148—Dello clay loam, drained, 0 to 2 percent slopes, overwashed

Map Unit Setting

National map unit symbol: hhsj
Elevation: 0 to 30 feet
Mean annual precipitation: 12 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Dello and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dello

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 12 inches: clay loam
2C - 12 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Hydric soil rating: Yes

Minor Components

Columbia

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Egbert

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Merritt

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Unnamed, stratified substratum
Percent of map unit: 3 percent
Hydric soil rating: No

150—Dumps

Map Unit Composition
Dumps: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dumps

Interpretive groups
Land capability classification (irrigated): 8s
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Pits
Percent of map unit: 5 percent
Hydric soil rating: No

Xerorthents
Percent of map unit: 5 percent
Hydric soil rating: No

152—Egbert mucky clay loam, partially drained, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: 2yc9y
Elevation: 0 to 10 feet
Mean annual precipitation: 17 to 18 inches
Mean annual air temperature: 62 to 62 degrees F
Frost-free period: 311 to 319 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Egbert and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Egbert

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

Ap - 0 to 8 inches: mucky clay loam
A1 - 8 to 19 inches: clay
A2 - 19 to 36 inches: clay
A3 - 36 to 54 inches: clay
Cg - 54 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Guard

Percent of map unit: 3 percent
Landform: Rims on basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Kingile

Percent of map unit: 2 percent
Landform: Marshes
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)

Hydric soil rating: Yes

Peltier

Percent of map unit: 2 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Valdez

Percent of map unit: 2 percent
Landform: Deltas
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Ryde

Percent of map unit: 2 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Merritt

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Rindge

Percent of map unit: 2 percent
Landform: Deltas
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

153—Egbert silty clay loam, partially drained, 0 to 2 percent slopes, MLRA 16

Map Unit Setting

National map unit symbol: 2xlc5
Elevation: 0 to 40 feet
Mean annual precipitation: 12 to 19 inches
Mean annual air temperature: 61 to 62 degrees F
Frost-free period: 319 to 323 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Egbert and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Egbert

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

Ap - 0 to 6 inches: silty clay loam
A - 6 to 31 inches: silty clay loam
Bg1 - 31 to 45 inches: silty clay loam
Bg2 - 45 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 40 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C

Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Scribner
Percent of map unit: 4 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Grangeville
Percent of map unit: 3 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Stockton
Percent of map unit: 3 percent
Landform: Valley floors
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Willows
Percent of map unit: 3 percent
Landform: Valley floors
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Columbia
Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA002CA - Freshwater, Stratified, Fluventic Sites (PROVISIONAL)
Hydric soil rating: No

154—Egbert silty clay loam, sandy substratum, partially drained, 0 to 2 percent slopes, MLRA 16

Map Unit Setting

National map unit symbol: 2yc99
Elevation: 0 to 10 feet
Mean annual precipitation: 15 to 17 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 319 to 322 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Egbert and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Egbert

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 14 inches: silty clay loam
A - 14 to 40 inches: clay loam
C - 40 to 60 inches: sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 36 to 48 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C

Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Dello
Percent of map unit: 4 percent
Landform: Flood plains on sloughs
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Ryde
Percent of map unit: 4 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Merritt
Percent of map unit: 4 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Grangeville
Percent of map unit: 3 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

159—Fluvaquents, 0 to 2 percent slopes, frequently flooded, MLRA 16

Map Unit Setting
National map unit symbol: 2yc98
Elevation: -10 to 10 feet
Mean annual precipitation: 13 to 18 inches
Mean annual air temperature: 61 to 62 degrees F
Frost-free period: 318 to 348 days

Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents

Setting

Landform: Marshes
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock and/or grassy organic material

Typical profile

A - 0 to 14 inches: silty clay loam
Cg1 - 14 to 20 inches: silty clay loam
Cg2 - 20 to 26 inches: silt loam
Cg3 - 26 to 36 inches: silty clay loam
Cg4 - 36 to 44 inches: silty clay loam
Cg5 - 44 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 7w
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Peltier

Percent of map unit: 4 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Columbia

Percent of map unit: 4 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA002CA - Freshwater, Stratified, Fluventic Sites (PROVISIONAL)
Hydric soil rating: Yes

Kingile

Percent of map unit: 4 percent
Landform: Marshes, flood plains
Landform position (three-dimensional): Tread, dip
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Ryde

Percent of map unit: 3 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

160—Galt clay, 0 to 1 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2w8cj
Elevation: 10 to 140 feet
Mean annual precipitation: 12 to 21 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 250 to 300 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Galt and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Galt

Setting

Landform: Basin floors on fan remnants

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from igneous, metamorphic and sedimentary rock over cemented alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

A - 0 to 5 inches: clay
Bss1 - 5 to 13 inches: clay
Bss2 - 13 to 22 inches: clay
Bss3 - 22 to 32 inches: clay
2Bkqm - 32 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 5 to 32 inches
Frequency of flooding: Rare
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: D
Ecological site: R017XD001CA - CLAYEY
Hydric soil rating: Yes

Minor Components

Dierssen

Percent of map unit: 5 percent
Hydric soil rating: No

Clear lake

Percent of map unit: 5 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Hydric soil rating: Yes

San joaquin

Percent of map unit: 5 percent
Hydric soil rating: No

166—Grangeville fine sandy loam, partially drained, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hht3
Elevation: 10 to 50 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Grangeville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Grangeville

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 20 inches: fine sandy loam
C - 20 to 60 inches: stratified loamy sand to silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Unnamed, throughout
Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, altered soils
Percent of map unit: 3 percent
Hydric soil rating: No

Dello
Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: Yes

Columbia
Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: Yes

Merritt
Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: Yes

Egbert
Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: Yes

167—Grangeville clay loam, partially drained, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: hht4
Elevation: 10 to 50 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Grangeville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Grangeville

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 16 inches: clay loam
C - 16 to 32 inches: fine sandy loam
C - 32 to 60 inches: stratified loamy sand to silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Egbert

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Merritt

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Columbia

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Unnamed, altered soils

Percent of map unit: 3 percent
Hydric soil rating: No

169—Guard clay loam, drained, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hht6
Elevation: -10 to 30 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Guard and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Guard

Setting

Landform: Rims on basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 15 inches: clay loam
Bkq - 15 to 72 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Hydric soil rating: Yes

Minor Components

Perched, water below 3 feet
Percent of map unit: 3 percent
Hydric soil rating: No

Hollenbeck
Percent of map unit: 2 percent
Hydric soil rating: No

Grangeville
Percent of map unit: 2 percent
Hydric soil rating: No

Stockton
Percent of map unit: 2 percent
Hydric soil rating: No

Devries
Percent of map unit: 1 percent
Landform: Valley floors
Hydric soil rating: Yes

Ryde
Percent of map unit: 1 percent
Landform: Flood plains
Hydric soil rating: Yes

Rioblancho
Percent of map unit: 1 percent
Landform: Valley floors
Hydric soil rating: Yes

Guard
Percent of map unit: 1 percent
Landform: Valley floors
Hydric soil rating: Yes

Scribner
Percent of map unit: 1 percent
Landform: Flood plains
Hydric soil rating: Yes

Columbia
Percent of map unit: 1 percent
Landform: Flood plains
Ecological site: R016XA002CA - Freshwater, Stratified, Fluventic Sites (PROVISIONAL)
Hydric soil rating: Yes

181—Jacktone-Urban land complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhtl
Elevation: 10 to 40 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Jacktone and similar soils: 50 percent
Urban land: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Jacktone

Setting

Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 22 inches: clay
Bk - 22 to 34 inches: clay
2Bkqm - 34 to 37 inches: indurated
2Bk - 37 to 46 inches: stratified sandy loam to clay loam
3Bkq - 46 to 60 inches: cemented

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: About 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D

Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: Yes

Description of Urban Land

Interpretive groups
Land capability classification (irrigated): 8
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Hollenbeck
Percent of map unit: 6 percent
Hydric soil rating: No

Stockton
Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed, mod coarse tex overwash
Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, mod fine mod fine tex overwash
Percent of map unit: 2 percent
Hydric soil rating: No

196—Manteca fine sandy loam, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: hhv2
Elevation: 20 to 110 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Manteca and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Manteca

Setting
Landform: Terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 11 inches: fine sandy loam
Bk - 11 to 24 inches: fine sandy loam
2Bkqm - 24 to 35 inches: indurated
2Bq - 35 to 54 inches: cemented
3C - 54 to 74 inches: stratified loamy sand to loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Tinnin

Percent of map unit: 4 percent
Hydric soil rating: No

Veritas

Percent of map unit: 4 percent
Hydric soil rating: No

Guard

Percent of map unit: 3 percent
Landform: Rims
Hydric soil rating: Yes

Arents, altered

Percent of map unit: 2 percent
Hydric soil rating: No

Trahern

Percent of map unit: 2 percent
Landform: Terraces
Hydric soil rating: Yes

197—Merritt silty clay loam, partially drained, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhv3
Elevation: 0 to 50 feet
Mean annual precipitation: 13 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Merritt and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Merritt

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 17 inches: silty clay loam
B - 17 to 49 inches: silt loam
C - 49 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Hydric soil rating: Yes

Minor Components

Egbert
Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: Yes

Ryde
Percent of map unit: 3 percent
Landform: Flood plains
Hydric soil rating: Yes

Unnamed, ponded
Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Grangeville
Percent of map unit: 3 percent
Hydric soil rating: No

Guard
Percent of map unit: 2 percent
Landform: Rims
Hydric soil rating: Yes

198—Merritt silty clay loam, partially drained, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting
National map unit symbol: hhv4
Elevation: 0 to 50 feet
Mean annual precipitation: 13 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Merritt and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Merritt

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 15 inches: silty clay loam
B - 15 to 42 inches: silt loam
C - 42 to 60 inches: stratified loamy fine sand to silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Grangeville

Percent of map unit: 5 percent
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: No

Dello

Percent of map unit: 5 percent
Landform: Flood plains
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Unnamed, channel dredge tailings

Percent of map unit: 5 percent
Hydric soil rating: No

201—Nord loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhv7
Elevation: 50 to 70 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 61 degrees F

Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Nord and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nord

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 25 inches: loam
C - 25 to 60 inches: stratified sandy loam to loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: B
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Minor Components

Merritt

Percent of map unit: 4 percent
Landform: Flood plains
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: Yes

Delhi

Percent of map unit: 4 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Honcut

Percent of map unit: 3 percent

Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Unnamed, gravelly throughout
Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, slightly brittle substratum
Percent of map unit: 2 percent
Hydric soil rating: No

243—Scribner clay loam, partially drained, 0 to 2 percent slopes, MLRA 16

Map Unit Setting

National map unit symbol: 2x4l6
Elevation: 0 to 10 feet
Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 61 to 62 degrees F
Frost-free period: 319 to 327 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Scribner, partially drained, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scribner, Partially Drained

Setting

Landform: Backswamps
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine-loamy alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap1 - 0 to 4 inches: clay loam
Ap2 - 4 to 12 inches: clay loam
A - 12 to 21 inches: clay loam
Ab - 21 to 39 inches: clay loam
Bg - 39 to 51 inches: clay loam
Bkg - 51 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 0.28 in/hr)
Depth to water table: About 20 to 35 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 0.4 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Egbert

Percent of map unit: 5 percent
Landform: Backswamps
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Sailboat

Percent of map unit: 5 percent
Landform: Levees
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA002CA - Freshwater, Stratified, Fluventic Sites (PROVISIONAL)
Hydric soil rating: No

Gazwell

Percent of map unit: 2 percent
Landform: Backswamps
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Tinnin

Percent of map unit: 1 percent
Landform: Dunes
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Guard

Percent of map unit: 1 percent
Landform: Rims on basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Dierssen

Percent of map unit: 1 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

255—Tinnin loamy coarse sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhwz
Elevation: 20 to 70 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Tinnin and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tinnin

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

A - 0 to 28 inches: loamy coarse sand
C1 - 28 to 53 inches: loamy coarse sand
C2 - 53 to 75 inches: loamy coarse sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Minor Components

Delhi

Percent of map unit: 4 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Honcut

Percent of map unit: 3 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Manteca

Percent of map unit: 3 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Veritas

Percent of map unit: 3 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Unnamed, med tex substratum

Percent of map unit: 1 percent
Hydric soil rating: No

Timor

Percent of map unit: 1 percent
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

261—Valdez silt loam, organic substratum, partially drained, 0 to 2 percent slopes, MLRA 16

Map Unit Setting

National map unit symbol: 2x4kv
Elevation: -10 to 20 feet
Mean annual precipitation: 13 to 18 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 270 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Valdez, organic substratum, partially drained, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Valdez, Organic Substratum, Partially Drained

Setting

Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources, and herbaceous organic material from reeds and tules

Typical profile

Ap - 0 to 14 inches: silt loam
Cg - 14 to 40 inches: silty clay loam
2Ab - 40 to 50 inches: mucky silt loam
3Oe - 50 to 79 inches: mucky peat

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 36 to 48 inches
Frequency of flooding: RareNone
Frequency of ponding: None
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 11.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: C
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Minor Components

Itano
Percent of map unit: 3 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Piper
Percent of map unit: 2 percent
Landform: Levees, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA004CA - Island Sandhills (PROVISIONAL)
Hydric soil rating: Yes

Shinkee
Percent of map unit: 2 percent
Landform: Flood plains, deltas
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Peltier
Percent of map unit: 2 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Ryde
Percent of map unit: 2 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Kingile

Percent of map unit: 2 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

Rindge

Percent of map unit: 2 percent
Landform: Deltas, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R016XA001CA - Tidally-Influenced, Freshwater Sites (PROVISIONAL)
Hydric soil rating: Yes

266—Veritas fine sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhxb
Elevation: 20 to 80 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Veritas and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Veritas

Setting

Landform: Fan skirts
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 15 inches: fine sandy loam
Bk - 15 to 54 inches: fine sandy loam
2Bqm - 54 to 70 inches: cemented

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to duripan
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Grangeville

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, mod fine textured surface

Percent of map unit: 4 percent
Hydric soil rating: No

Bisgani

Percent of map unit: 2 percent
Landform: Alluvial fans
Hydric soil rating: Yes

Unnamed, w/ mod fine texture above hardpan

Percent of map unit: 1 percent
Hydric soil rating: No

Madera

Percent of map unit: 1 percent
Hydric soil rating: No

Jahant

Percent of map unit: 1 percent
Hydric soil rating: No

Unnamed, w/ hardpan above 40 inches

Percent of map unit: 1 percent
Hydric soil rating: No

Tinnin

Percent of map unit: 1 percent

Hydric soil rating: No

W—Water

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

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Appendix B
Plant Species Observed

PLANT SPECIES OBSERVED

Family	Scientific Name	Common Name	Native/ Introduced	Cal-IPC Rating
FERNS & ALLIES				
Azollaceae	*Azolla filiculoides*	Mosquito fern	N	
Equisetaceae	*Equisetum* sp.	Horsetail	N	
EUDICOTS				
Adoxaceae	*Sambucus nigra* ssp. *caerulea*	Blue elderberry	N	
Amaranthaceae	*Alternanthera philoxeroides*	Alligator weed	I	
	Amaranthus albus	Tumbleweed	I	
Anacardiaceae	*Toxicodendron diversilobum*	Western poison oak	N	
Apiaceae	*Conium maculatum*	Poison hemlock	I	
Apocynaceae	*Apocynum cannabinum*	Indian hemp	N	
Asteraceae	*Artemisia douglasiana*	Mugwort	N	
	Baccharis glutinosa	Marsh baccharis	N	
	Baccharis pilularis ssp. *consanguinea*	Coyote brush	N	
	Bidens sp.	Beggar's Tick	N	
	Carduus pycnocephalus ssp. *p.*	Italian thistle	I	Moderate
	Centaurea solstitialis	Yellow star-thistle	I	High
	Cirsium vulgare	Bull thistle	I	Moderate
	Dittrichia graveolens	Stinkwort	I	Moderate
	Erigeron sp. (=*Conyza*)	Horseweed	--	
	Helenium puberulum	Sneezeweed	N	
	Helianthus annuus	Sunflower	N	
	Helminthotheca echioides	Bristly ox-tongue	I	Limited
	Lactuca serriola	Prickly lettuce	I	
	Pseudognaphalium luteoalbum	Cudweed	I	
	Silybum marianum	Milk thistle	I	
	Sonchus sp.	Sow thistle	I	
	Symphyotrichum subulatum var. *parviflorum*	Annual saltmarsh aster	N	
	Xanthium strumarium	Cocklebur	N	
Boraginaceae	*Heliotropium curassavicum* var. *oculatum*	Alkali heliotrope	N	
Brassicaceae	*Lepidium latifolium*	Perennial pepperweed	I	High
	Hirschfeldia incana	Summer mustard	I	Moderate
	Raphanus sp.	Radish	I	
Chenopodiaceae	*Chenopodium album*	Lamb's quarters	I	
	Salsola tragus	Russian thistle	I	Limited
Convolvulaceae	*Convolvulus arvensis*	Bindweed	I	
	Cuscuta sp.	Dodder	--	
Euphorbiaceae	*Croton setigerus*	Turkey-mullein	N	

Family	Scientific Name	Common Name	Native/ Introduced	Cal-IPC Rating
	Euphorbia lathyris	Caper spurge	I	
	Euphorbia maculata	Spotted spurge	I	
	Ricinus communis	Castor bean	I	Limited
Fabaceae	*Acmispon americanus* var. *a.*	Spanish clover	N	
	Lathyrus jepsonii var. *californicus* [1]	Wild pea	N	
	Melilotus albus	White sweetclover	I	
	Robinia pseudoacacia	Black locust	I	Limited
	Vicia sativa	Spring vetch	I	
	Vicia villosa	Hairy vetch	I	
Fagaceae	*Quercus lobata*	Valley oak	N	
	Quercus sp.	Oak (sapling)	--	
Gentianaceae	*Zeltnera* sp.	Centaury	N	
Juglandaceae	*Carya illinoinensis*	Pecan	I	
	Juglans hindsii	Northern CA black walnut	N	
	Juglans regia	English walnut	I	
Lamiaceae	*Mentha* sp.	Mint	--	
	Marrubium vulgare	Horehound	I	
Malvaceae	*Malvella leprosa*	Alkali-mallow	N	
Myrtaceae	*Eucalyptus* sp.	Eucalyptus, gum tree	I	
Oleaceae	*Fraxinus latifolia*	Oregon ash	N	
Onagraceae	*Epilobium brachycarpum*	Fireweed	N	
	Oenothera elata ssp. *hirsutissima*	Evening-primrose	N	
Phytolaccaceae	*Phytolacca americana* var. *a.*	Pokeweed	I	Limited
Platanaceae	*Platanus ×hispanica*	London plane (sapling)	I	
Polygonaceae	*Persicaria maculosa*	Lady's thumb	I	
	Rumex conglomeratus	Dock	I	
	Rumex crispus	Curly dock	I	Limited
	Rumex dentatus	Dock	I	
Rosaceae	*Potentilla* sp.	Cinquefoil	--	
	Prunus dulcis	Almond	I	
	Rosa sp.	Rose	--	
	Rubus armeniacus	Himalayan blackberry	I	High
	Rubus ursinus	California blackberry	N	
Rubiaceae	*Cephalanthus occidentalis*	California button willow	N	
	Galium aparine	Goose grass	N	
Salicaceae	*Populus fremontii* ssp. *fremontii*	Fremont cottonwood	N	
	Salix babylonica	Weeping willow	I	
	Salix exigua	Willow	N	
	Salix gooddingii	Goodding's black willow	N	

Family	Scientific Name	Common Name	Native/ Introduced	Cal-IPC Rating
	Salix lasiandra	Willow	N	
	Salix lasiolepis	Arroyo willow	N	
Sapindaceae	*Acer negundo*	Box elder	N	
Simaroubaceae	*Ailanthus altissima*	Tree of heaven	I	Moderate
Solanaceae	*Datura* sp.	Jimson weed	--	
	Nicotiana acuminata var. *multiflora*	Tobacco	I	
	Nicotiana glauca	Tree tobacco	I	Moderate
	Solanum sp.	Nightshade	--	
Ulmaceae	*Ulmus* sp.	Elm	I	
Urticaceae	*Urtica dioica*	Stinging nettle	N	
Verbenaceae	*Phyla nodiflora*	Phyla	N	
	Verbena litoralis	Vervain	I	
Viscaceae	*Phoradendron leucarpum*	American mistletoe	N	
MONOCOTS				
Alismataceae	*Sagittaria latifolia*	Arrowhead	N	
Arecaceae	*Washingtonia robusta*	Mexican fan palm (seedling)	I	Moderate
Araceae	*Lemna minuta*	Duckweed	N	
Cyperaceae	*Bolboschoenus maritimus* ssp. *paludosus*	Alkali bulrush	N	
	Carex barbarae	Whiteroot sedge	N	
	Cyperus eragrostis	Nutsedge	N	
	Schoenoplectus sp.	Naked-stemmed bulrush	--	
Haloragaceae	*Myriophyllum* sp.	Water-milfoil	--	
Hydrocharitaceae	*Egeria densa*	Brazilian waterweed	I	High
Iridaceae	*Iris pseudacorus*	Iris	I	Limited
Juncaceae	*Juncus balticus* ssp. *ater*	Baltic rush	N	
	Juncus effusus ssp. *pacificus*	Pacific rush	N	
Poaceae	*Arundo donax*	Giant reed	I	High
	Avena sp.	Wild oat	I	Moderate
	Bromus diandrus	Ripgut grass	I	Moderate
	Bromus rubens	Red brome	I	High
	Cynodon dactylon	Bermuda grass	I	Moderate
	Cortaderia selloana	Pampas grass	I	High
	Elymus triticoides	Beardless wild rye	N	
	Festuca perennis	Rye grass	I	
	Paspalum dilatatum	Dallis grass	I	
	Phalaris sp.	Canary grass	--	
	Polypogon monspeliensis	Annual beard grass	I	Limited
	Setaria sp.	Bristle grass	--	
	Sorghum halepense	Johnson grass	I	

Family	Scientific Name	Common Name	Native/ Introduced	Cal-IPC Rating
Pontederiaceae	*Eichhornia crassipes*	Water hyacinth	I	High
Potamogetonaceae	*Potamogeton crispus*	Crisp-leaved pondweed	I	Moderate
Typhaceae	*Typha* sp.	Cattail	--	

NOTES:

1. Found in single location, on north end of small island in San Joaquin River near north end of survey area. Specimen was puberulent on stems and leaves, including young and mature leaves. Growing just above the ordinary high water mark and area of frequent inundation, with *Rubus ursinus* and *Rubus armeniacus*. Collection made of specimen and will be deposited at UC Davis arboretum.

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Appendix C
Database Queries

Workflow

Describe site

Location, habitat, species presence

- Description of project habitat

Species presence

- Determine presence of the California Red-legged Frog
- Determine presence of the California Tiger Salamander
- Determine presence of the Delta Smelt
- Determine presence of the Giant Garter Snake
- Determine presence of the Large-flowered Fiddleneck
- Determine presence of the Monarch Butterfly
- Determine presence of the Palmate bracted Bird's Beak
- Determine presence of the Riparian Brush Rabbit
- Determine presence of the Valley Elderberry Longhorn Beetle
- Determine presence of the Vernal Pool Fairy Shrimp
- Determine presence of the Vernal Pool Tadpole Shrimp

Progress

Describe activities

Mossdale

Biological Assessment

Prepared using IPaC

March 29, 2022

The purpose of this Biological Assessment (BA) is to assess the effects of the proposed project and determine whether the project may affect any Federally threatened, endangered, proposed or candida species. This BA is prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act (16 U.S.C. 1536 (c)).

Prepared using IPaC version 6.72.3-rc7

Workflow

Describe site

Location, habitat, species presence

- Description of project habitat

Species presence

- Determine presence of the California Red-legged Frog
- Determine presence of the California Tiger Salamander
- Determine presence of the Delta Smelt
- Determine presence of the Giant Garter Snake
- Determine presence of the Large-flowered Fiddleneck
- Determine presence of the Monarch Butterfly
- Determine presence of the Palmate-bracted Bird's Beak
- Determine presence of the Riparian Brush Rabbit
- Determine presence of the Valley Elderberry Longhorn Beetle
- Determine presence of the Vernal Pool Fairy Shrimp
- Determine presence of the Vernal Pool Tadpole Shrimp

Progress

Describe activities

Workflow

Describe site

Location, habitat, species presence

- Description of project habitat

Species presence

- Determine presence of the California Red-legged Frog
- Determine presence of the California Tiger Salamander
- Determine presence of the Delta Smelt
- Determine presence of the Giant Garter Snake
- Determine presence of the Large-flowered Fiddleneck
- Determine presence of the Monarch Butterfly
- Determine presence of the Palmate-bracted Bird's Beak
- Determine presence of the Riparian Brush Rabbit
- Determine presence of the Valley Elderberry Longhorn Beetle
- Determine presence of the Vernal Pool Fairy Shrimp
- Determine presence of the Vernal Pool Tadpole Shrimp

Progress

Describe activities

1 Description Of The Action

1.1 Project Name

Mossdale

1.2 Executive Summary

Based on the information you provided, write a short, high-level summary of your project. Ideally, thi should be one paragraph.

Effect determination summary

1.3 Project Description

1.3.1 Location



LOCATION
San Joaquin County, California

1.3.2 Description of project habitat

1.3

This section describes the habitat present on the project site and any site surveys or habitat assessments that have been conducted

surveys or habitat assessments that have been conducted.

Not Started

- OR -

Describe the various habitat present on site, including habitat quality and distribution. If appropriate, refer to uploaded surveys or assessments related to this information.

Describe the various habitat present on site, including habitat quality and distribution. If appropriate, refer to uploaded surveys or assessments related to this information.

1.3.3 Project proponent information

Provide information regarding who is proposing to conduct the project, and their contact information. Please provide details on whether there is a Federal nexus.

Requesting Agency

FULL NAME
Melissa Denena

STREET ADDRESS
787 The Alameda

Suite 250

CITY	STATE	ZIP
San Jose	CA	95126

PHONE NUMBER	E-MAIL ADDRESS
4089811151	mdenena@esassoc.com

1.3.4 Project purpose

Clearly describe the purpose and need for the proposed project, including a brief description of a proposed actions in relation to the defined needs. Essentially, explain why the project is being proposed, e.g., to provide new road access, to provide housing, etc.

1.3.5 Project type and deconstruction

In this section, deconstruct (or, subdivide) the proposed action into all of its activities and structures, including all of the project elements (e.g., construction, operation, maintenance). For each activity and structure, describe the "who, what, when, where, and how" at an appropriate le of detail for evaluating the exposure and response of the species and critical habitats to that activity.

The activities and structures you identify will provide the headings under which the Effects Analy (i.e., effects of the action) for the species and critical habitat will be organized in Section 2 below and in your final document (i.e., biological assessment or other environmental review document). Later you will describe each activity and structure in greater detail

For this section, consider all activities related to the following portions of your project, where applicable:

- *Project timeline and sequencing*
- *Site preparation*
- *Construction access and staging*
- *Post-project site restoration*
- *Conservation and compensation activities (both on- and off-site)*
- *Operations and maintenance*

Workflow

Describe site

Location, habitat, species presence

- Description of project habitat

Species presence

- Determine presence of the California Red-legged Frog
- Determine presence of the California Tiger Salamander
- Determine presence of the Delta Smelt
- Determine presence of the Giant Garter Snake
- Determine presence of the Large-flowered Fiddleneck
- Determine presence of the Monarch Butterfly
- Determine presence of the Palmate-bracted Bird's Beak
- Determine presence of the Riparian Brush Rabbit
- Determine presence of the Valley Elderberry Longhorn Beetle
- Determine presence of the Vernal Pool Fairy Shrimp
- Determine presence of the Vernal Pool Tadpole Shrimp

Progress

Describe activities

1.3.6 Anticipated environmental stressors

Describe the anticipated effects of your proposed project on the aspects of the land, air and wate that will occur due to the activities above. These should be based on the activity deconstructions done in the previous section and will be used to inform the action area.

1.4 Action Area

The action area is the specific spatial polygon encompassing all of the areas where land, water, or a will be detectably changed due to the proposed project and any other activities that would not occur but for the proposed action. This typically does not include the broader area where affected wildlife might travel or move to after being exposed to those modifications within the action area. The action area should not be confused with other geographic descriptions, such as: analysis area, project area recovery unit, management unit, etc. These may be helpful in analyzing population effects, but are n an equivalent substitute for the regulatory description of an action area.

Depending on the nature of the project, the action area may extend beyond the limits of the actual project location. IPaC will prompt you through the process to help you determine an appropriate acti area. Once determined, effects to species should be considered throughout the action area.

1.5 Conservation Measures

1.6 Prior Consultation History

Provide information on any previous consultation(s) on this project with USFWS, including dates an outcomes. Information from prior consultations may be helpful to the biologist reviewing the project. you wish to upload/attach consultation documents, please do so under Section '1.8 Other Reports a helpful Information'.

1.7 Other Agency Partners And Interested Parties

Identify any other agencies (Federal, State, Local, Tribal) involved in the project, and include each agency's role, the appropriate contact, and their contact information. Also, as applicable and availab provide information regarding any known interested parties.

1.8 Other Reports And Helpful Information

Communicate any other helpful information that you have not previously provided. You can also upload additional files that may be helpful (e.g., reports) and they will become an Appendix to this document.

Workflow

Describe site

Location, habitat, species presence

- Description of project habitat

Species presence

- Determine presence of the California Red-legged Frog
- Determine presence of the California Tiger Salamander
- Determine presence of the Delta Smelt
- Determine presence of the Giant Garter Snake
- Determine presence of the Large-flowered Fiddleneck
- Determine presence of the Monarch Butterfly
- Determine presence of the Palmate-bracted Bird's Beak
- Determine presence of the Riparian Brush Rabbit
- Determine presence of the Valley Elderberry Longhorn Beetle
- Determine presence of the Vernal Pool Fairy Shrimp
- Determine presence of the Vernal Pool Tadpole Shrimp

Progress

Describe activities

2 Species Effects Analysis

This section describes, species by species, the effects of the proposed action on listed, proposed, and candidate species, and the habitat on which they depend. In this document, effects are broken down a direct interactions (something happening directly to the species) or indirect interactions (something happening to the environment on which a species depends that could then result in effects to the species).

These interactions encompass effects that occur both during project construction and those which coul be ongoing after the project is finished. All effects, however, should be considered, including effects fr direct and indirect interactions and cumulative effects.

2.1 California Red-Legged Frog

2.2 California Tiger Salamander

2.3 Delta Smelt

2.4 Giant Garter Snake

2.5 Large-Flowered Fiddleneck

2.6 Monarch Butterfly

2.7 Palmate-Bracted Bird's Beak

2.8 Riparian Brush Rabbit

2.9 Valley Elderberry Longhorn Beetle

2.10 Vernal Pool Fairy Shrimp

2.11 Vernal Pool Tadpole Shrimp

3 Critical Habitat Effects Analysis

3.1 Delta Smelt Critical Habitat

Workflow

Describe site

Location, habitat, species presence

- Description of project habitat

Species presence

- Determine presence of the California Red-legged Frog
- Determine presence of the California Tiger Salamander
- Determine presence of the Delta Smelt
- Determine presence of the Giant Garter Snake
- Determine presence of the Large-flowered Fiddleneck
- Determine presence of the Monarch Butterfly
- Determine presence of the Palmate-bracted Bird's Beak
- Determine presence of the Riparian Brush Rabbit
- Determine presence of the Valley Elderberry Longhorn Beetle
- Determine presence of the Vernal Pool Fairy Shrimp
- Determine presence of the Vernal Pool Tadpole Shrimp

Progress

Describe activities

Workflow

Describe site

Location, habitat, species presence

- Description of project habitat

Species presence

- Determine presence of the California Red-legged Frog
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- Determine presence of the Riparian Brush Rabbit
- Determine presence of the Valley Elderberry Longhorn Beetle
- Determine presence of the Vernal Pool Fairy Shrimp
- Determine presence of the Vernal Pool Tadpole Shrimp

Progress

Describe activities

4 Summary Discussion, Conclusion, And Effect Determinations

4.1 Effect Determination Summary

SPECIES (COMMON NAME) OR CRITICAL HABITAT	SCIENTIFIC NAME	LISTING STATUS	PRESENT IN ACTION AREA	EFFECT DETERMINATION
California Red-legged Frog	Rana draytonii	Threatened		
California Tiger Salamander	Ambystoma californiense	Threatened		
Delta Smelt	Hypomesus transpaci cus	Threatened		
Giant Garter Snake	Thamnophis gigas	Threatened		
Large- owered Fiddleneck	Amsinckia grandi ora	Endangered		
Monarch Butter y	Danaus plexippus	Candidate		
Palmate-bracted Bird's Beak	Cordylanthus palmatus	Endangered		
Riparian Brush Rabbit	Sylvilagus bachmani riparius	Endangered		
Valley Elderberry Longhorn Beetle	Desmocerus californicus dimorphus	Threatened		
Vernal Pool Fairy Shrimp	Branchinecta lynchi	Threatened		
Vernal Pool Tadpole Shrimp	Lepidurus packardi	Endangered		
Delta Smelt critical habitat	Hypomesus transpaci cus	Final		

4.2 Summary Discussion

Describe in summary form the overall effects your proposed project will have to species and critical habitat within your action area.

4.3 Conclusion

Provide clear statements of conclusion that help USFWS understand your findings.

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: BIOS selection

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Alkali Meadow *Alkali Meadow*	CTT45310CA	None	None	G3	S2.1	
alkali milk-vetch *Astragalus tener var. tener*	PDFAB0F8R1	None	None	G2T1	S1	1B.2
alkali-sink goldfields *Lasthenia chrysantha*	PDAST5L030	None	None	G2	S2	1B.1
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
An andrenid bee *Andrena subapasta*	IIHYM35210	None	None	G1G2	S1S2	
big tarplant *Blepharizonia plumosa*	PDAST1C011	None	None	G1G2	S1S2	1B.1
Blennosperma vernal pool andrenid bee *Andrena blennospermatis*	IIHYM35030	None	None	G2	S2	
bristly sedge *Carex comosa*	PMCYP032Y0	None	None	G5	S2	2B.1
brittlescale *Atriplex depressa*	PDCHE042L0	None	None	G2	S2	1B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
cackling (=Aleutian Canada) goose *Branta hutchinsii leucopareia*	ABNJB05035	Delisted	None	G5T3	S3	WL
California alkali grass *Puccinellia simplex*	PMPOA53110	None	None	G3	S2	1B.2
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3G4T1	S1	FP
California horned lark *Eremophila alpestris actia*	ABPAT02011	None	None	G5T4Q	S4	WL
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
California red-legged frog *Rana draytonii*	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California tiger salamander - central California DPS *Ambystoma californiense pop. 1*	AAAAA01181	Threatened	Threatened	G2G3	S3	WL
caper-fruited tropidocarpum *Tropidocarpum capparideum*	PDBRA2R010	None	None	G1	S1	1B.1
chaparral ragwort *Senecio aphanactis*	PDAST8H060	None	None	G3	S2	2B.2
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Coastal and Valley Freshwater Marsh *Coastal and Valley Freshwater Marsh*	CTT52410CA	None	None	G3	S2.1	
Conservancy fairy shrimp *Branchinecta conservatio*	ICBRA03010	Endangered	None	G2	S2	
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G3G4	S1S2	
curved-foot hygrotus diving beetle *Hygrotus curvipes*	IICOL38030	None	None	G1	S1	
Delta button-celery *Eryngium racemosum*	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Delta mudwort *Limosella australis*	PDSCR10030	None	None	G4G5	S2	2B.1
Delta smelt *Hypomesus transpacificus*	AFCHB01040	Threatened	Endangered	G1	S1	
Delta tule pea *Lathyrus jepsonii var. jepsonii*	PDFAB250D2	None	None	G5T2	S2	1B.2
diamond-petaled California poppy *Eschscholzia rhombipetala*	PDPAP0A0D0	None	None	G1	S1	1B.1
Elderberry Savanna *Elderberry Savanna*	CTT63440CA	None	None	G2	S2.1	
eulachon *Thaleichthys pacificus*	AFCHB04010	Threatened	None	G5	S2	
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
giant gartersnake *Thamnophis gigas*	ARADB36150	Threatened	Threatened	G2	S2	
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
Great Valley Cottonwood Riparian Forest *Great Valley Cottonwood Riparian Forest*	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest *Great Valley Mixed Riparian Forest*	CTT61420CA	None	None	G2	S2.2	
Great Valley Valley Oak Riparian Forest *Great Valley Valley Oak Riparian Forest*	CTT61430CA	None	None	G1	S1.1	
Greene's tuctoria *Tuctoria greenei*	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
hardhead *Mylopharodon conocephalus*	AFCJB25010	None	None	G3	S3	SSC
heartscale *Atriplex cordulata var. cordulata*	PDCHE040B0	None	None	G3T2	S2	1B.2
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
legenere *Legenere limosa*	PDCAM0C010	None	None	G2	S2	1B.1
lesser saltscale *Atriplex minuscula*	PDCHE042M0	None	None	G2	S2	1B.1
loggerhead shrike *Lanius ludovicianus*	ABPBR01030	None	None	G4	S4	SSC
longfin smelt *Spirinchus thaleichthys*	AFCHB03010	Candidate	Threatened	G5	S1	
longhorn fairy shrimp *Branchinecta longiantenna*	ICBRA03020	Endangered	None	G1	S1S2	
long-styled sand-spurrey *Spergularia macrotheca var. longistyla*	PDCAR0W062	None	None	G5T2	S2	1B.2
marsh skullcap *Scutellaria galericulata*	PDLAM1U0J0	None	None	G5	S2	2B.2
Mason's lilaeopsis *Lilaeopsis masonii*	PDAPI19030	None	Rare	G2	S2	1B.1
merlin *Falco columbarius*	ABNKD06030	None	None	G5	S3S4	WL
midvalley fairy shrimp *Branchinecta mesovallensis*	ICBRA03150	None	None	G2	S2S3	
moestan blister beetle *Lytta moesta*	IICOL4C020	None	None	G2	S2	
Northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S3	SSC
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool *Northern Hardpan Vernal Pool*	CTT44110CA	None	None	G3	S3.1	
northern harrier *Circus hudsonius*	ABNKC11011	None	None	G5	S3	SSC
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G4?	S1S2	
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
palmate-bracted bird's-beak *Chloropyron palmatum*	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
prairie falcon *Falco mexicanus*	ABNKD06090	None	None	G5	S4	WL
recurved larkspur *Delphinium recurvatum*	PDRAN0B1J0	None	None	G2?	S2?	1B.2
riparian (=San Joaquin Valley) woodrat *Neotoma fuscipes riparia*	AMAFF08081	Endangered	None	G5T1Q	S1	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
riparian brush rabbit *Sylvilagus bachmani riparius*	AMAEB01021	Endangered	Endangered	G5T1	S1	
Sacramento anthicid beetle *Anthicus sacramento*	IICOL49010	None	None	G1	S1	
Sacramento splittail *Pogonichthys macrolepidotus*	AFCJB34020	None	None	GNR	S3	SSC
saline clover *Trifolium hydrophilum*	PDFAB400R5	None	None	G2	S2	1B.2
San Joaquin coachwhip *Masticophis flagellum ruddocki*	ARADB21021	None	None	G5T2T3	S2?	SSC
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin pocket mouse *Perognathus inornatus*	AMAFD01060	None	None	G2G3	S2S3	
San Joaquin spearscale *Extriplex joaquinana*	PDCHE041F3	None	None	G2	S2	1B.2
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
shining navarretia *Navarretia nigelliformis ssp. radians*	PDPLM0C0J2	None	None	G4T2	S2	1B.2
side-flowering skullcap *Scutellaria lateriflora*	PDLAM1U0Q0	None	None	G5	S2	2B.2
slough thistle *Cirsium crassicaule*	PDAST2E0U0	None	None	G1	S1	1B.1
song sparrow ("Modesto" population) *Melospiza melodia*	ABPBXA3010	None	None	G5	S3?	SSC
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
steelhead - Central Valley DPS *Oncorhynchus mykiss irideus pop. 11*	AFCHA0209K	Threatened	None	G5T2Q	S2	
stinkbells *Fritillaria agrestis*	PMLIL0V010	None	None	G3	S3	4.2
Suisun Marsh aster *Symphyotrichum lentum*	PDASTE8470	None	None	G2	S2	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T2	S3	
Valley Oak Woodland *Valley Oak Woodland*	CTT71130CA	None	None	G3	S2.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Valley Sink Scrub *Valley Sink Scrub*	CTT36210CA	None	None	G1	S1.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp *Lepidurus packardi*	ICBRA10010	Endangered	None	G4	S3S4	
watershield *Brasenia schreberi*	PDCAB01010	None	None	G5	S3	2B.3
western bumble bee *Bombus occidentalis*	IIHYM24250	None	None	G2G3	S1	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western ridged mussel *Gonidea angulata*	IMBIV19010	None	None	G3	S1S2	
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP
woolly rose-mallow *Hibiscus lasiocarpos var. occidentalis*	PDMAL0H0R3	None	None	G5T3	S3	1B.2
Wright's trichocoronis *Trichocoronis wrightii var. wrightii*	PDAST9F031	None	None	G4T3	S1	2B.1
yellow-headed blackbird *Xanthocephalus xanthocephalus*	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 96

CALIFORNIA NATIVE PLANT SOCIETY

Search Results

27 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3712183:3812113:3812123:3812112:3712182:3712184:3812124:3812122:3812114:3712172:3712173:3712174]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Astragalus tener var. *tener*	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	No Photo Available
Atriplex cordulata var. *cordulata*	heartscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G3T2	S2	1B.2	 © 1994 Robert E. Preston, Ph.D.
Azolla microphylla	Mexican mosquito fern	Azollaceae	annual/perennial herb	Aug	None	None	G5	S4	4.2	No Photo Available
Blepharizonia plumosa	big tarplant	Asteraceae	annual herb	Jul-Oct	None	None	G1G2	S1S2	1B.1	No Photo Available
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	None	None	G5	S3	2B.3	 ©2014 Kirsten Bovee
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1	 Dean Wm. Taylor 1997
Castilleja campestris var. *succulenta*	succulent owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	(Mar)Apr-May	FT	CE	G4? T2T3	S2S3	1B.2	No Photo Available
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	G3T3	S3	4.2	No Photo Available
Chloropyron palmatum	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct	FE	CE	G1	S1	1B.1	No Photo Available
Cicuta maculata var. *bolanderi*	Bolander's water-hemlock	Apiaceae	perennial herb	Jul-Sep	None	None	G5T4T5	S2?	2B.1	No Photo Available
Cirsium crassicaule	slough thistle	Asteraceae	annual/perennial	May-Aug	None	None	G1	S1	1B.1	

Cirsium crassicaule	slough thistle	Asteraceae	annual/perennial herb	May-Aug	None	None	G1	S1	1B.1	No Photo Available
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	No Photo Available
Eryngium racemosum	Delta button-celery	Apiaceae	annual/perennial herb	(May)Jun-Oct	None	CE	G1	S1	1B.1	No Photo Available
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	No Photo Available
Hesperevax caulescens	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	G3	S3	4.2	 © 2017 John Doyen
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	 © 2020 Steven Perry
Lasthenia ferrisiae	Ferris' goldfields	Asteraceae	annual herb	Feb-May	None	None	G3	S3	4.2	 © 2009 Zoya Akulova
Lathyrus jepsonii var. *jepsonii*	Delta tule pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	None	None	G5T2	S2	1B.2	 © 2003 Mark Fogiel
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	 ©2000 John Game
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	No Photo Available
Limosella australis	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	May-Aug	None	None	G4G5	S2	2B.1	 © 2020 Richard Sage
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	 ©2013 Debra L.

										Cook
Scutellaria lateriflora	side-flowering skullcap	Lamiaceae	perennial rhizomatous herb	Jul-Sep	None	None	G5	S2	2B.2	No Photo Available
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2	No Photo Available
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	Asteraceae	annual herb	May-Sep	None	None	G4T3	S1	2B.1	No Photo Available
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	No Photo Available
Tropidocarpum capparideum	caper-fruited tropidocarpum	Brassicaceae	annual herb	Mar-Apr	None	None	G1	S1	1B.1	No Photo Available

Showing 1 to 27 of 27 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 29 March 2022].

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Appendix C-2

2025 Biological Resources Memo

ESA

2600 Capitol Avenue
Suite 200
Sacramento, CA 95816
916.564.4500 phone
916.564.4501 fax

esassoc.com

memorandum

date	May 29, 2025
to	Tiffany Edwards
cc	Chuck Hughes
from	Amanda Segura-Moon, Zach Leisz
subject	Biological Resource Memo for the Mossdale Project Dryland Levee Extension and Restoration Areas 13, 14, and 16

This memo provides the results of additional resource assessments conducted for the Mossdale Tract Area (study area) that were completed after the Mossdale Tract Area Urban Flood Risk Reduction Project Draft Biological Resource Assessment (February 2023) was written. The additional assessments were conducted on privately owned areas included in the dryland levee component of the study area and Restoration Sites (RS) 13, 14, and 16. These areas were not included in the 2023 Draft Biological Resource Assessment due to access constraints. Some portions of the study area remain unsurveyed due to access constraints, however these portions consist largely of agricultural areas and private residences where the presence of special-status biological resources are much less likely.

The entire study area is comprised of over 1,200 acres including an existing levee in San Joaquin County, California. The area covered in this memo includes discontinuous parcels in the dryland levee area and in RS 13, 14, and 16 portions of the study area. The additional parcels surveyed for this memo and the survey dates are in **Table 1**. The included parcels are mainly used for agriculture, including field crops and orchards. Surveys were conducted by Zach Leisz and Amanda Segura-Moon.

Biological Communities and Special-Status Plants

The biological communities described in the 2023 Report remain accurate for this study area. Please reference Chapter 3 of the original report for the community descriptions.

The dryland levee and RS 13, 14 and 16 study areas include agriculture, ruderal, and riparian forest communities (see enclosed updated **Figure 3-1**). The memo study area is dominated by the agricultural community, including row crops, orchards, and associated infrastructure associated with agricultural operations. There are also multiple areas of ruderal community, which is a highly disturbed community including the dirt levee road and adjacent areas with low vegetation due to herbicide use, and mostly nonnative annual weeds where vegetation is present. There are also mapped areas of riparian forest, occurring adjacent to water. This community's canopy is dominated by valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*), and Oregon ash (*Fraxinus latifolia*).

TABLE 1
ADDITIONAL PARCELS SURVEYED AFTER 2023 DRAFT REPORT

Assessor's Parcel Number (APN)[1]	Survey Date
241-330-320 241-330-330 241-330-340	November 8, 2024
268-320-080 268-320-120 268-320-130 268-320-140 268-320-180 268-320-190 226-030-220	December 18, 2024
239-030-090 239-030-140	December 20, 2024
226-020-320 241-330-050	January 24, 2025
226-050-180 226-100-100 226-100-130	May 5, 2025

Note:
1. Only those portions of each APN overlapping with the study area were surveyed.

Based on the communities mapped and new areas surveyed, there is no change in the Potential to Occur determinations of any of the special status plant species listed in Table 3-2 of the 2023 Report.

Special-Status Wildlife

ESA biologists evaluated the new study areas for the potential to occur of several wildlife species, using the same methods as described in Chapter 4 of the 2023 report. The surveys of the new areas do not change any of the original PTO descriptions listed in Table 4-1. Most of the areas surveyed as part of this memo consist of agricultural and ruderal land uses that provide poor habitat for most special-status wildlife.

Valley Elderberry Longhorn Beetle Habitat

ESA Biologists Zach Liesz and Amanda Segura-Moon surveyed for any suitable Valley Elderberry Longhorn Beetle (VELB) habitat, following the same methodology detailed in Chapter 5 of the 2023 Report. During the additional surveys, one elderberry shrub was identified (Figure 1). The shrub was located on RS 13, with multiple stems over an inch in diameter, but no VELB exit holes were observed. No other elderberry shrubs were observed during the survey.

Enclosure: Updated Biological Communities Map, Figure 3-1.

Elderberry Shrub Map, Figure 1.



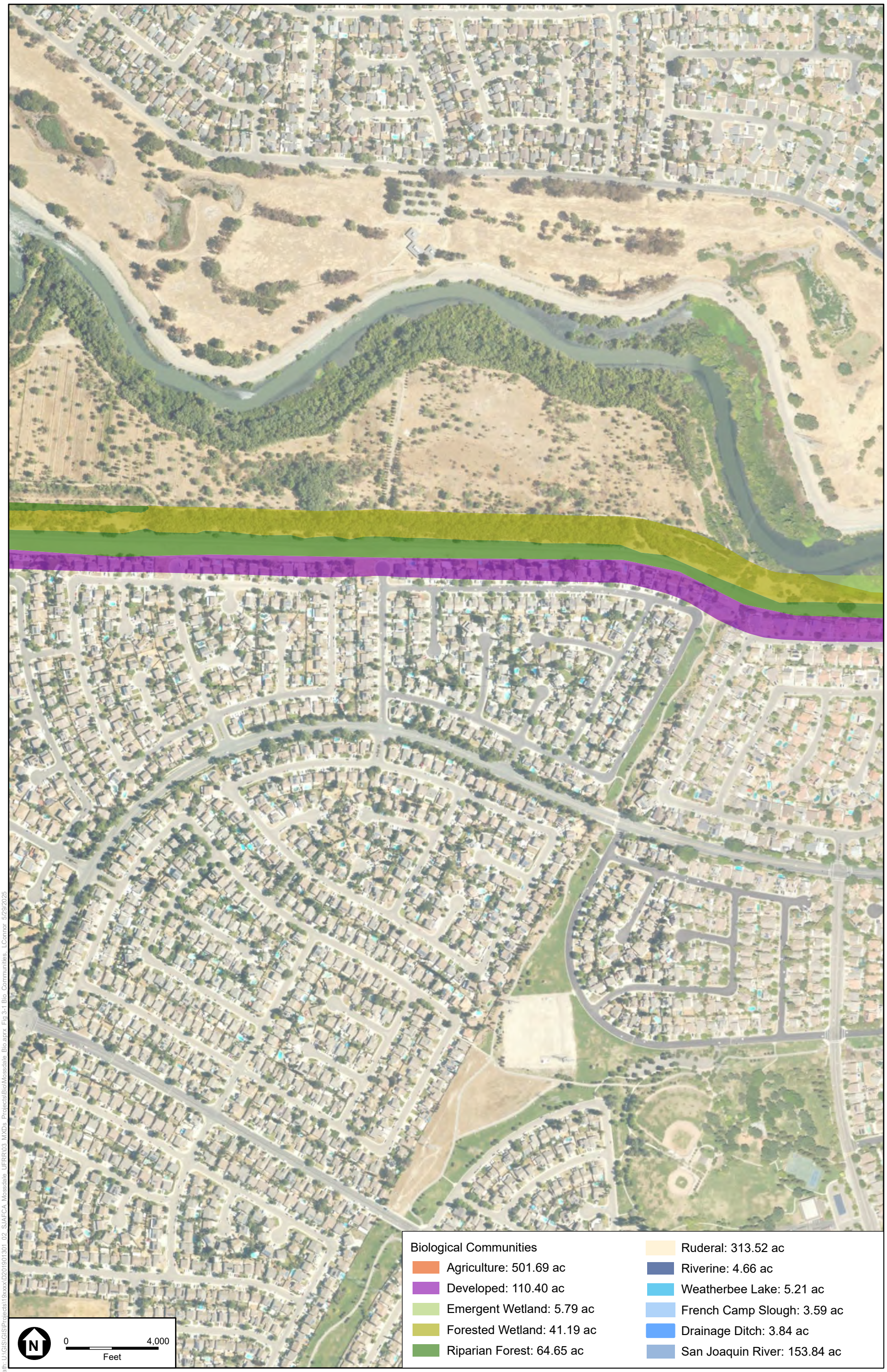
Path: U:\GIS\GIS\Projects\19xxxx\D2019013O1 02 SJAFCA Mossdale UFRR\03 MXDs Projects\Bio\Mossdale Bio.aprx Fig 3-1 Bio Communities LConnor 5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 a
Biological Communities

ESA

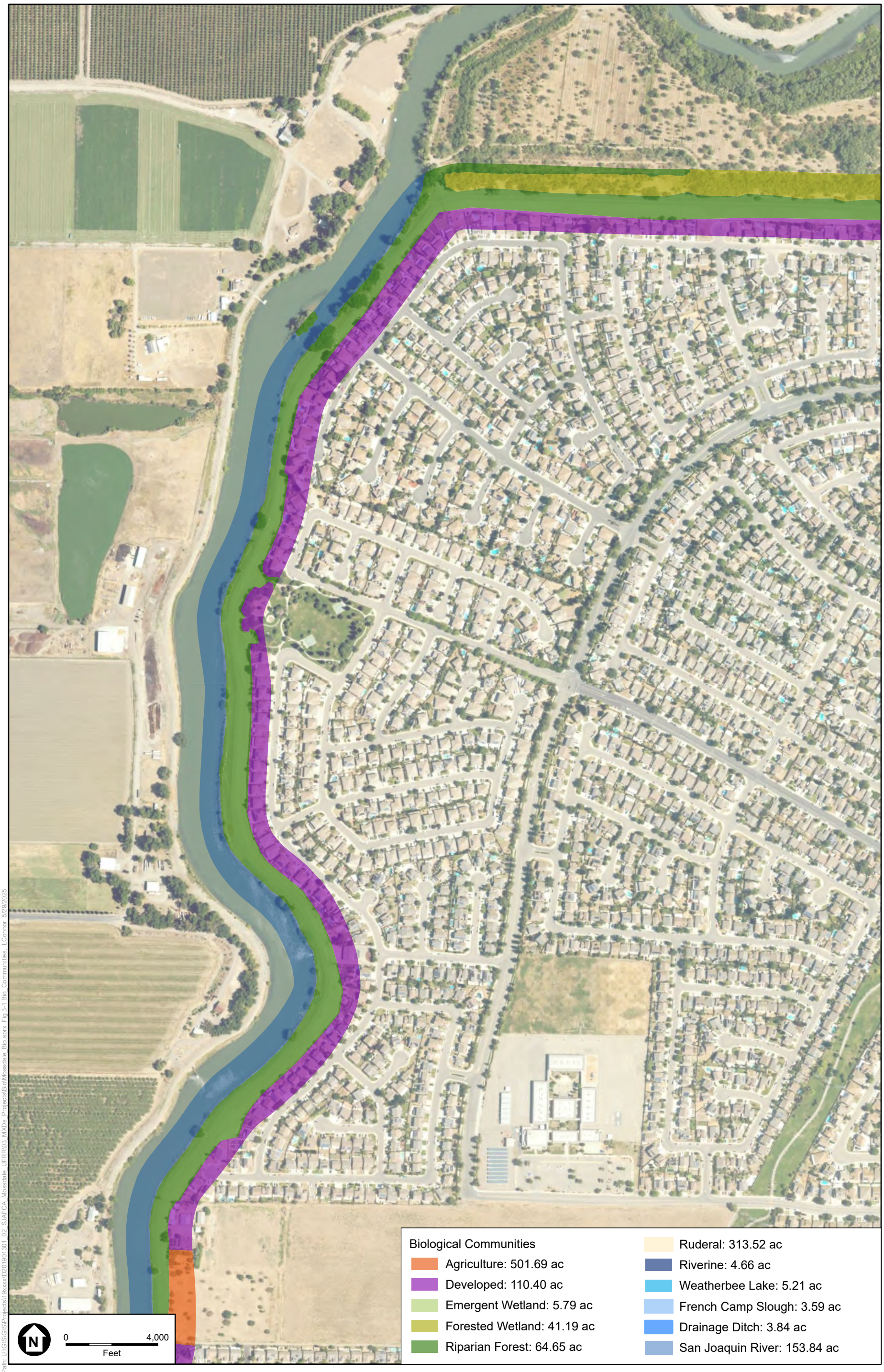


SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 b
Biological Communities

ESA

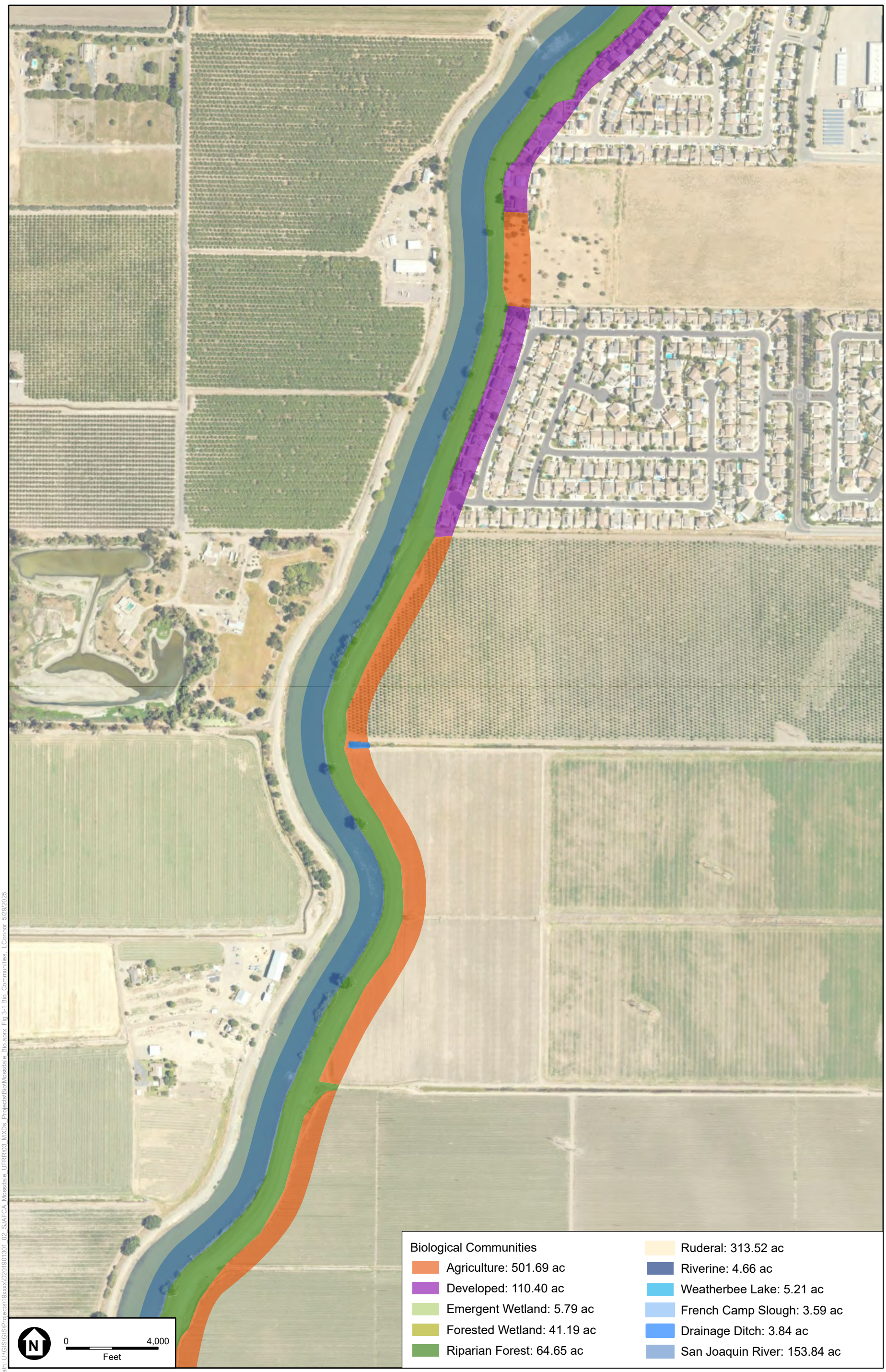


SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 c
Biological Communities

ESA



SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 d
Biological Communities

ESA



SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 e
Biological Communities

ESA



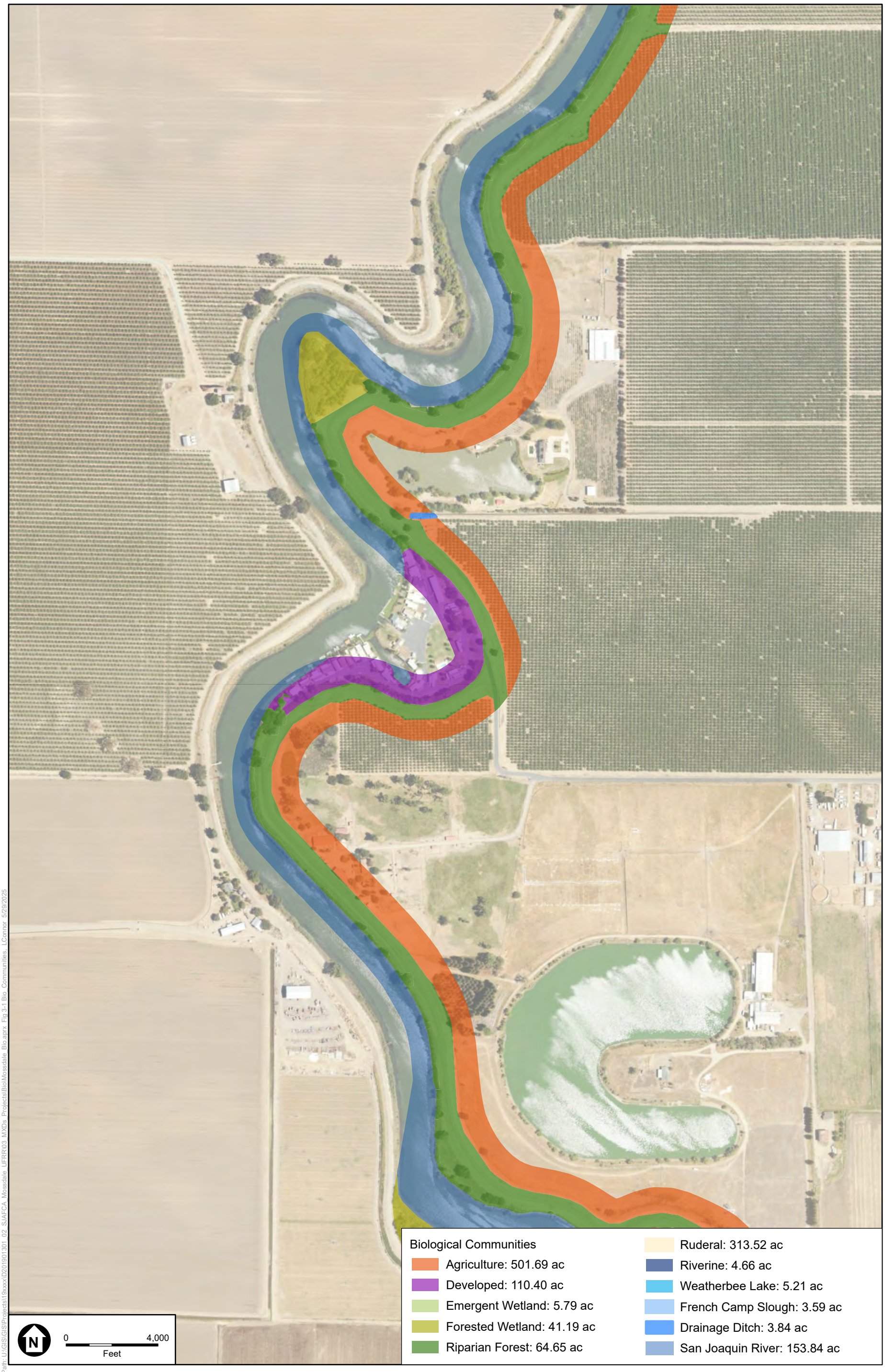
Path: U:\GIS\GIS\Projects\19xxxx\D20190130 1 02_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Bio\Mossdale_Bio.aprx Fig 3-1 Bio_Communities_LConnor 5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 f
Biological Communities

ESA



Path: U:\GIS\GIS\Projects\19xxxx\D20190130 1_02_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Bio\Mossdale_Bio.aprx Fig 3-1 Bio_Communities_ LConnor 5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 g
Biological Communities

ESA



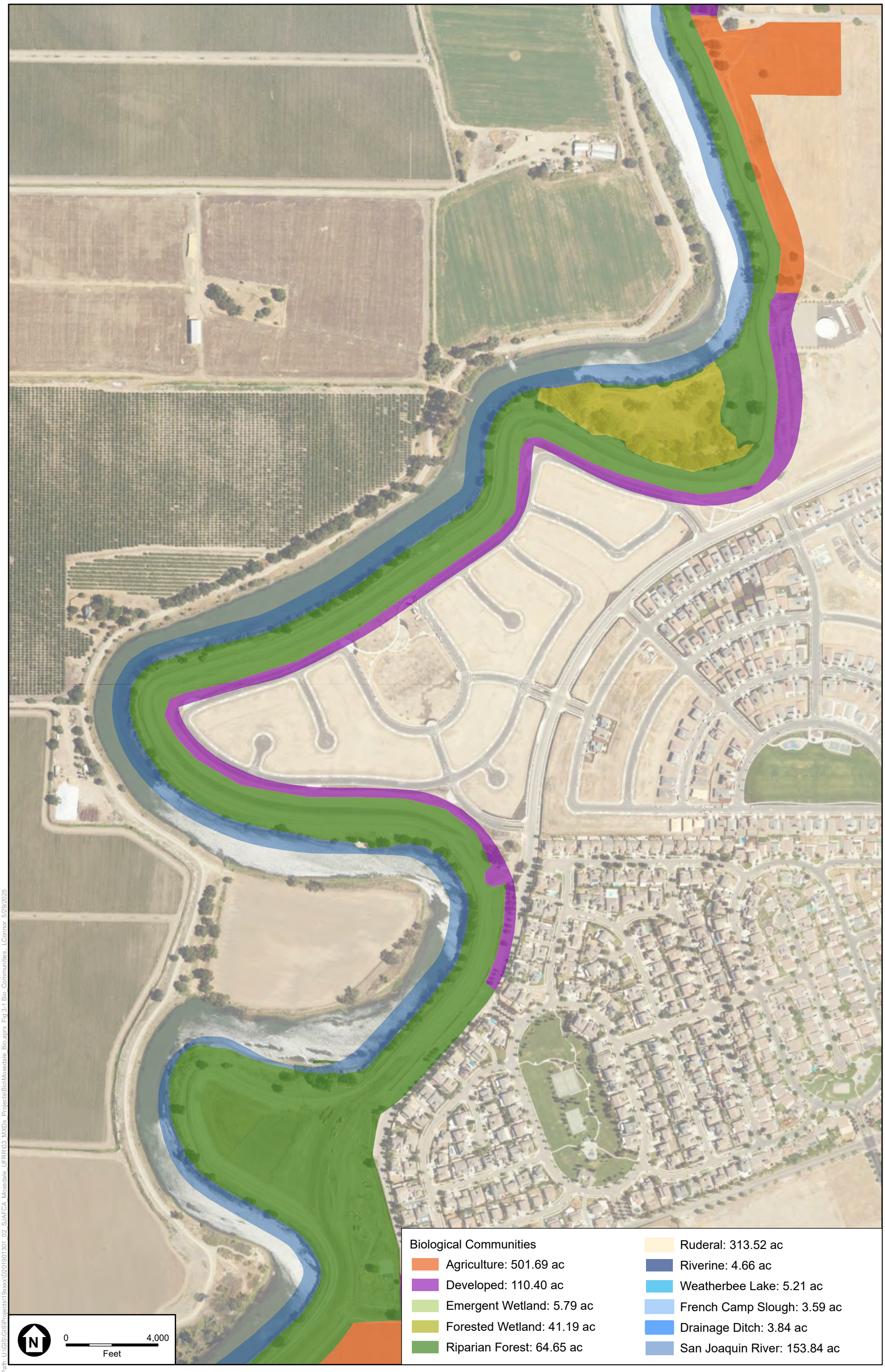
Path: U:\GIS\GIS\Projects\19xxxx\D20190130102_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Bio\Mossdale_Bio.aprx Fig 3-1 Bio_Communities, LConnor 5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 h
Biological Communities

ESA



Path: U:\GIS\GIS\Projects\19xxxx\D20190130102_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Bio\Mossdale_Bio.aprx Fig 3-1 Bio_Communities_LConnor 5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 i
Biological Communities

ESA



SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 j
Biological Communities

ESA

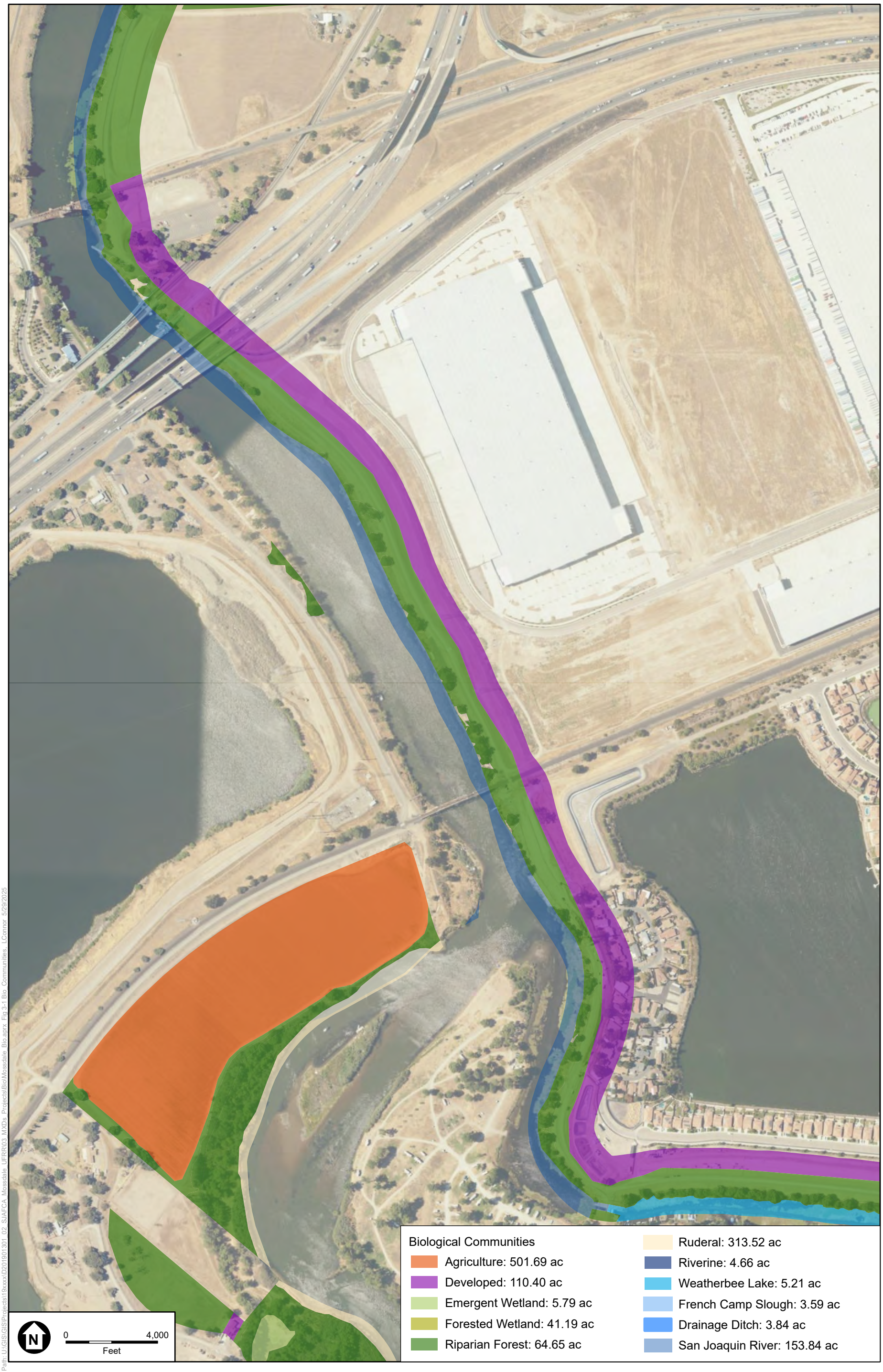


SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 k
Biological Communities

ESA



SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 I
Biological Communities

ESA



Path: U:\GIS\GIS\Projects\19xxxx\D20190130102_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Bio\Mossdale_Bio.aprx Fig 3-1 Bio_Communities, LConnor 5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 I-2
Biological Communities

ESA



Path: U:\GIS\GIS\Projects\119xxxx\ID2019013O1_02_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Bio\Mossdale_Bio.aprx Fig 3-1 Bio_Communities_LConnor_5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 m
Biological Communities

ESA



SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 n
Biological Communities

ESA



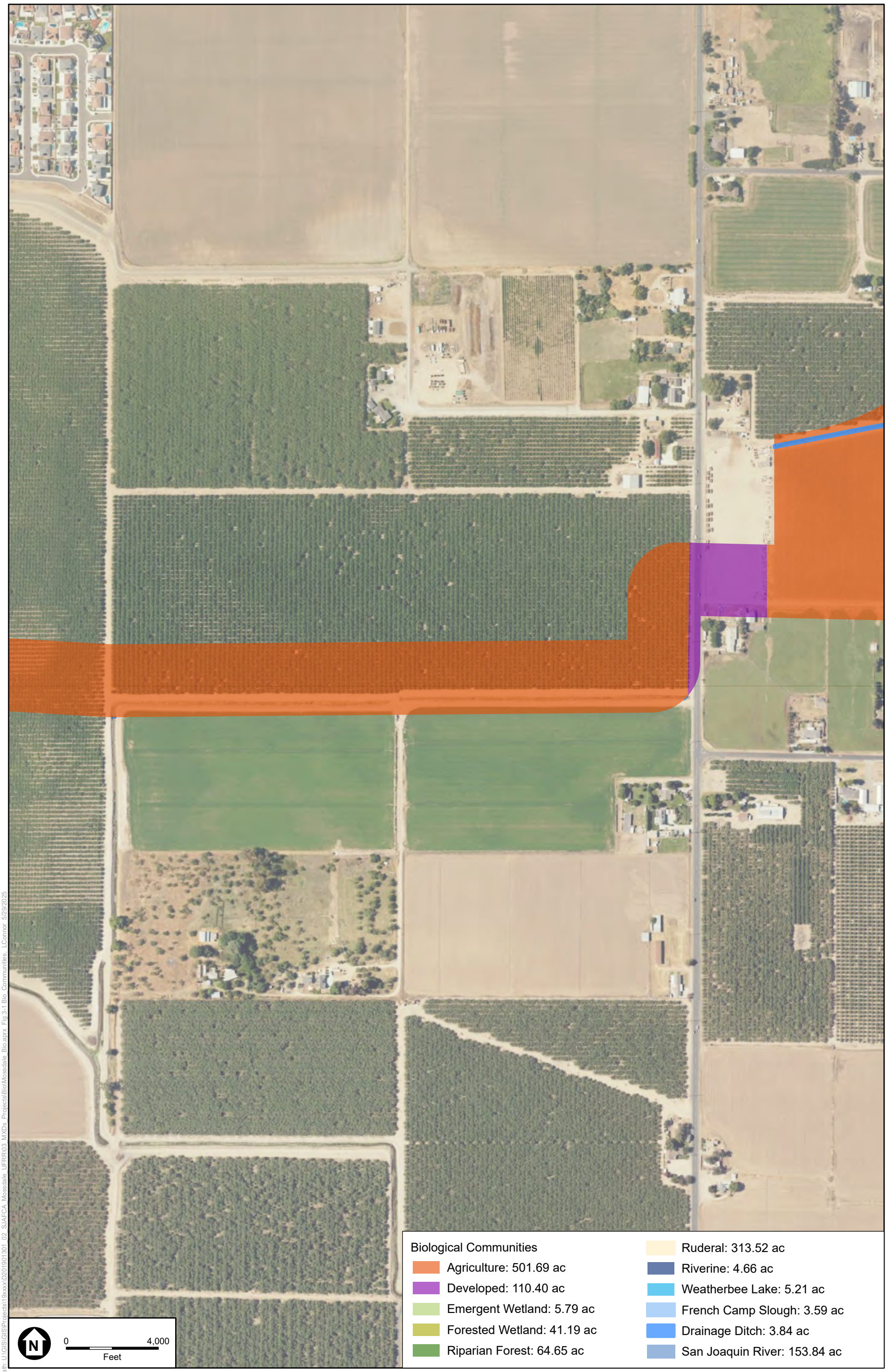
Path: U:\GIS\GIS\Projects\19xxxx\D201901301_02_SJAFCA_Mossdale_UFRR\03_MXDs_Projects\Bio\Mossdale_Bio.aprx Fig 3-1 Bio_Communities, LConnor 5/29/2025

SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 o
Biological Communities

ESA

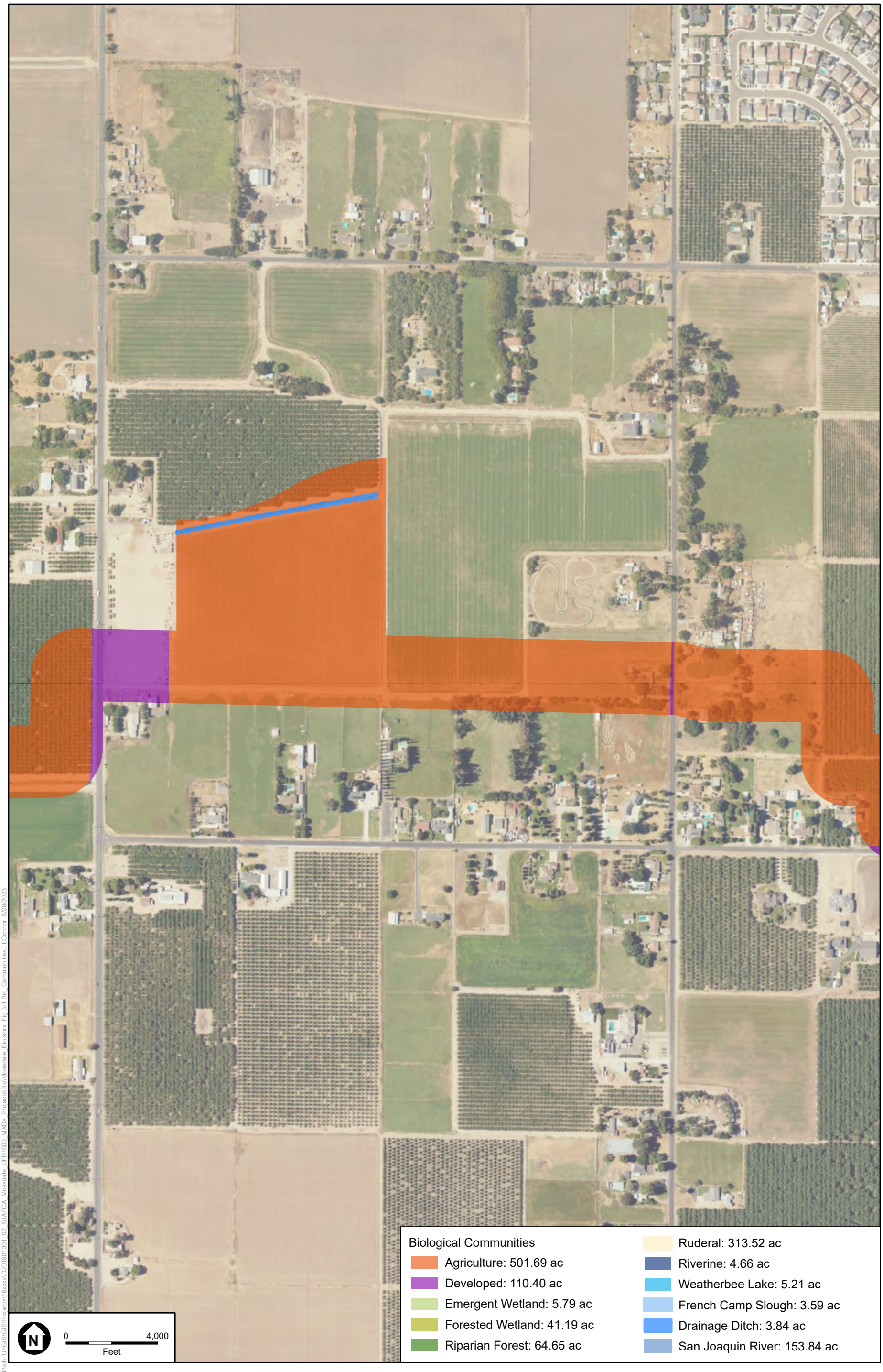


SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 p
Biological Communities

ESA

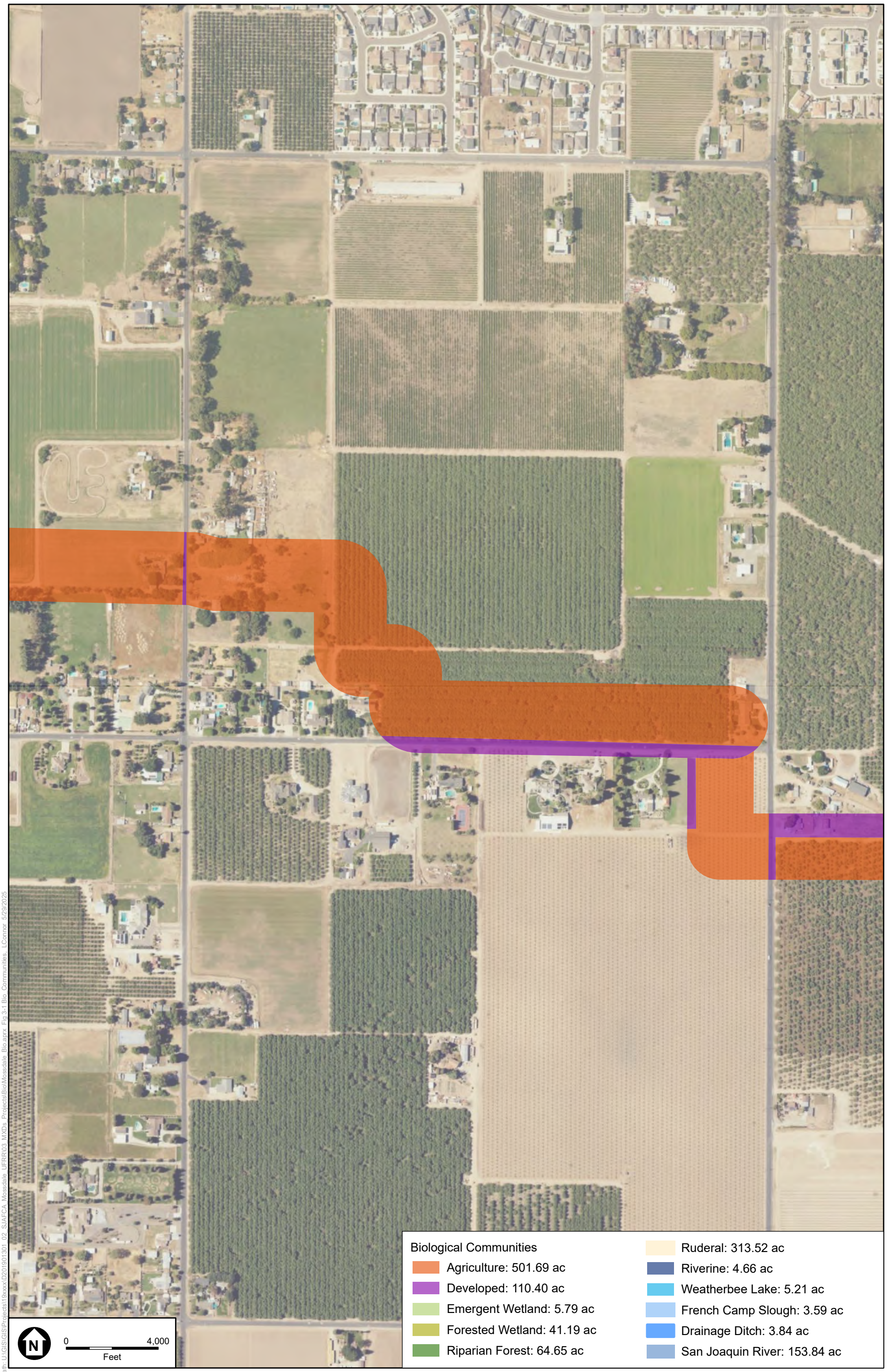


SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 q
Biological Communities

ESA

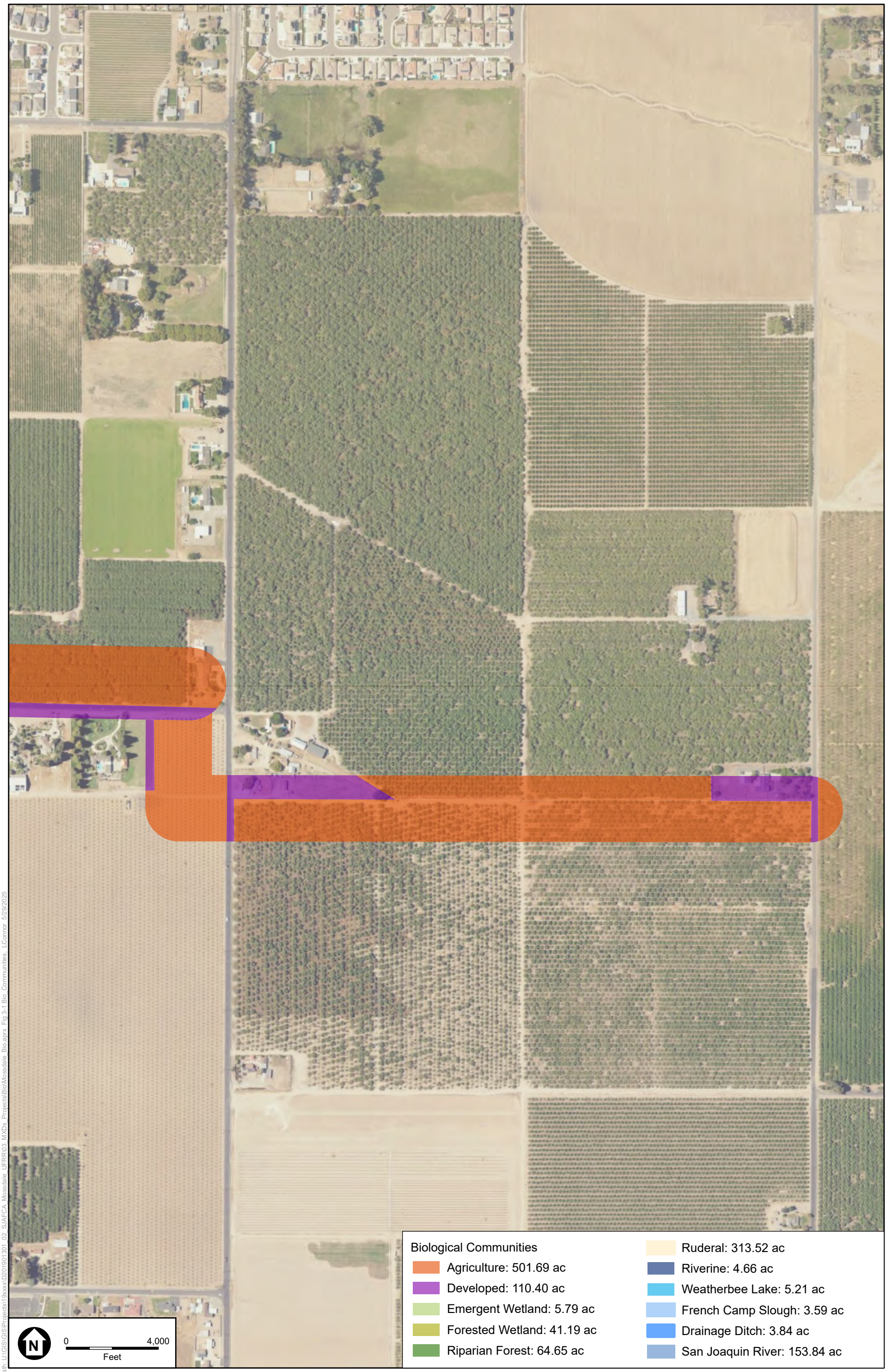


SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 r
Biological Communities

ESA

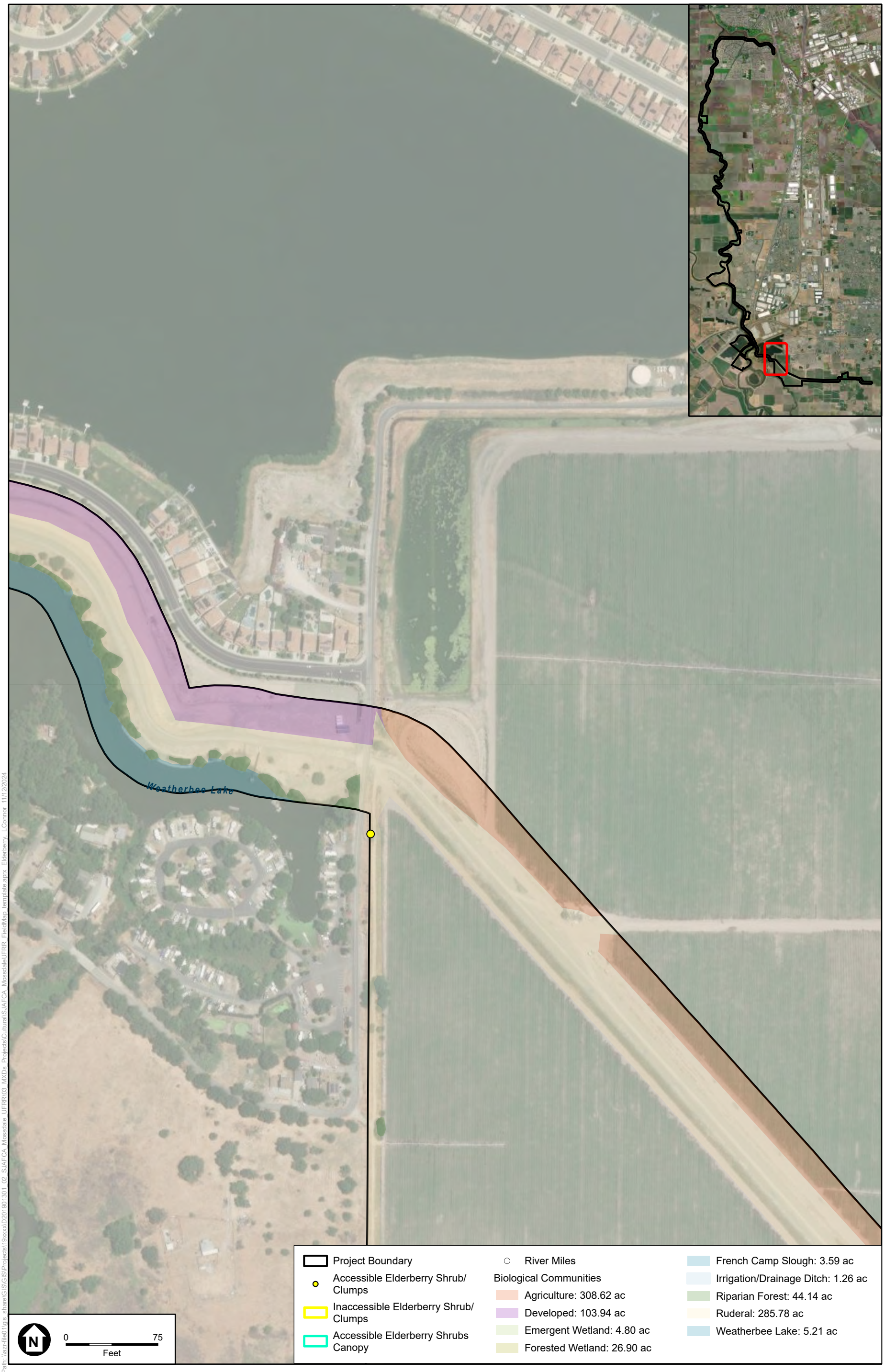


SOURCE: USDA, 2022; CPAD, 2021; KSN, 2025; PBI, 2022; ESA, 2025

SJAFCA Mossdale Tract Urban Flood Risk Reduction Project

Figure 3-1 s
Biological Communities

ESA



SOURCE: MAXAR, 2021; CPAD, 2021; KSN, 2022; PBI, 2022; ESA, 2022

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Figure 5-3 Elderberry Shrubs

Appendix D

2025 Updated Database Queries

IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

San Joaquin County, California



Local offices

San Francisco Bay-Delta Fish And Wildlife

(916) 930-5603
(916) 930-5654

650 Capitol Mall

Suite 8-300
Sacramento, CA 95814

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Riparian Brush Rabbit Sylvilagus bachmani riparius Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6189	Endangered

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

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California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Longfin Smelt Spirinchus thaleichthys There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9011	Endangered
Longfin Smelt Spirinchus thaleichthys No critical habitat has been designated for this species.	Proposed Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS

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Vernal Pool Fairy Shrimp Branchinecta lynchi	Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/498

Vernal Pool Tadpole Shrimp Lepidurus packardi	Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2246

Flowering Plants

NAME	STATUS
Large-flowered Fiddleneck Amsinckia grandiflora	Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/5558

Palmate-bracted Bird's Beak Cordylanthus palmatus	Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1616

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Delta Smelt Hypomesus transpacificus	Final

https://ecos.fws.gov/ecp/species/321#crithab

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and

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the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

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Bald and Golden Eagle information is not available at this time

Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding

(which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (FWS). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The FWS interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

NOT FOR CONSULTATION

Migratory bird information is not available at this time

Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

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3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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Facilities

Wildlife refuges and fish hatcheries

Refuge and fish hatchery information is not available at this time

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine

the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM1Bh
- PEM1Am
- PEM1C
- PEM1S
- PEM1A
- PEM1Ah
- PEM1Cx

FRESHWATER FORESTED/SHRUB WETLAND

- PSS1S
- PSS1Bh
- PFO1S
- PFO1Bh
- PFO1A
- PFO1B
- PSS1Ah
- PFO1Ah

FRESHWATER POND

- PUBFx
- PUBFh
- PUSCx
- PUBF
- PAB4Cx

LAKE

- L1UBHx

RIVERINE

- R1UBT
- R5UBFx
- R4SBCx
- R2UBFr
- R5UBF

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether

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wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Holt (3712184) OR Stockton East (3712182) OR Stockton West (3712183) OR Union Island (3712174) OR Lathrop (3712173) OR Manteca (3712172) OR Tracy (3712164) OR Vernalis (3712163) OR Ripon (3712162))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	SSC
Actinemys marmorata northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Amsinckia grandiflora large-flowered fiddleneck	PDBOR01050	Endangered	Endangered	G1	S1	1B.1
Anthicus sacramento Sacramento anthicid beetle	IICOL49010	None	None	G4	S4	
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Blepharizonia plumosa big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	WL

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Brasenia schreberi watershield	PDCAB01010	None	None	G5	S3	2B.3
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Chloropyron palmatum palmate-bracted bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
Cirsium crassicaule slough thistle	PDAST2E0U0	None	None	G1	S1	1B.1
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Delphinium recurvatum recurved larkspur	PDRAN0B1J0	None	None	G2?	S2	1B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Elderberry Savanna Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eryngium racemosum Delta button-celery	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Eschscholzia rhombipetala diamond-petaled California poppy	PDPAP0A0D0	None	None	G1	S1	1B.1
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Great Valley Valley Oak Riparian Forest						
Hibiscus lasiocarpos var. occidentalis	PDMAL0H0R3	None	None	G5T3	S3	1B.2
woolly rose-mallow						
Hypomesus transpacificus	AFCHB01040	Threatened	Endangered	G1	S1	
Delta smelt						
Lanius ludovicianus	ABPBR01030	None	None	G4	S4	SSC
loggerhead shrike						
Lasthenia chrysantha	PDAST5L030	None	None	G2	S2	1B.1
alkali-sink goldfields						
Laterallus jamaicensis coturniculus	ABNME03041	None	Threatened	G3T1	S2	FP
California black rail						
Lathyrus jepsonii var. jepsonii	PDFAB250D2	None	None	G5T2	S2	1B.2
Delta tule pea						
Lepidurus packardi	ICBRA10010	Endangered	None	G3	S3	
vernal pool tadpole shrimp						
Lilaeopsis masonii	PDAPI19030	None	Rare	G2	S2	1B.1
Mason's lilaeopsis						
Limosella australis	PDSCR10030	None	None	G5	S2	2B.1
Delta mudwort						
Linderiella occidentalis	ICBRA06010	None	None	G2G3	S2S3	
California linderiella						
Lytta moesta	IICOL4C020	None	None	G2	S2	
moestan blister beetle						
Madia radiata	PDAST650E0	None	None	G3	S3	1B.1
showy golden madia						
Masticophis flagellum ruddocki	ARADB21021	None	None	G5T2T3	S3	SSC
San Joaquin coachwhip						
Melospiza melodia pop. 1	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
song sparrow ("Modesto" population)						
Mylopharodon conocephalus	AFCJB25010	None	None	G3	S3	SSC
hardhead						
Neotoma fuscipes riparia	AMAFF08081	Endangered	None	G5T1	S1	SSC
riparian (=San Joaquin Valley) woodrat						
Oncorhynchus mykiss irideus pop. 11	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
steelhead - Central Valley DPS						
Perognathus inornatus	AMAFD01060	None	None	G3	S2S3	
San Joaquin pocket mouse						
Phrynosoma blainvillii	ARACF12100	None	None	G4	S4	SSC
coast horned lizard						
Puccinellia simplex	PMPOA53110	None	None	G2	S2	1B.2
California alkali grass						

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Rana boylii pop. 4 foothill yellow-legged frog - central coast DPS	AAABH01054	Threatened	Endangered	G3T2	S2	
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Rhaphiomidas trochilus San Joaquin Valley giant flower-loving fly	IIDIP05010	None	None	G1	S1	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Spirinchus thaleichthys pop. 2 longfin smelt - San Francisco Bay-Delta DPS	AFCHB03040	Endangered	Threatened	G5TNRQ	S1	
Sylvilagus bachmani riparius riparian brush rabbit	AMAEB01021	Endangered	Endangered	G5T1	S2	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Trichocoronis wrightii var. wrightii Wright's trichocoronis	PDAST9F031	None	None	G4T3	S1	2B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Tropidocarpum capparideum caper-fruited tropidocarpum	PDBRA2R010	None	None	G1	S1	1B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S3	
Xanthocephalus xanthocephalus yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 77

CNPS Rare Plant Inventory

Search Results

29 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [3712182:3712183:3712173:3712172:3712164:3712174:3712184:3712163:3712162]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Amsinckia grandiflora	large-flowered fiddleneck	Boraginaceae	annual herb	(Mar)Apr-May	FE	CE	G1	S1	1B.1	Yes	1974-01-01	 © 2015 Zoya Akulova
Astragalus tener var. *tener*	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	Yes	1994-01-01	No Photo Available
Atriplex cordulata var. *cordulata*	heartscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G3T2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.
Atriplex coronata var. *coronata*	crownscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4T3	S3	4.2	Yes	1994-01-01	 © 1994 Robert E. Preston, Ph.D.
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
Blepharizonia plumosa	big tarplant	Asteraceae	annual herb	Jul-Oct	None	None	G1G2	S1S2	1B.1	Yes	1994-01-01	No Photo Available

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	None	None	G5	S3	2B.3		2010-10-27	 ©2014 Kirsten Bovee
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1		1994-01-01	 Dean Wm. Taylor 1997
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	G3T3	S3	4.2	Yes	2007-05-22	 © 2019 John Doyen
Chloropyron palmatum	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Cirsium crassicaule	slough thistle	Asteraceae	annual/ perennial herb	May-Aug	None	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2	1B.2	Yes	1988-01-01	No Photo Available
Eryngium racemosum	Delta button-celery	Apiaceae	annual/ perennial herb	(May)Jun-Oct	None	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Eschscholzia rhombipetala	diamond-petaled California poppy	Papaveraceae	annual herb	Mar-Apr	None	None	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1988-01-01	No Photo Available
Hesperevax caulescens	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	G3	S3	4.2	Yes	2001-01-01	 © 2017 John Doyen

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	Yes	1974-01-01	 © 2020 Steven Perry
Lasthenia chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes	2019-09-30	 © 2009 California State University, Stanislaus
Lasthenia ferrisiae	Ferris' goldfields	Asteraceae	annual herb	Feb-May	None	None	G3	S3	4.2	Yes	2001-01-01	 © 2009 Zoya Akulova
Lathyrus jepsonii var. *jepsonii*	Delta tule pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	None	None	G5T2	S2	1B.2	Yes	1974-01-01	 © 2003 Mark Fogiel
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Limosella australis	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	May-Aug	None	None	G5	S2	2B.1		1994-01-01	 © 2020 Richard Sage
Madia radiata	showy golden madia	Asteraceae	annual herb	Mar-May	None	None	G3	S3	1B.1	Yes	1988-01-01	No Photo Available
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	None	None	G2	S2	1B.2		2015-10-15	 © 2017 Chris Winchell
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	Asteraceae	annual herb	May-Sep	None	None	G4T3	S1	2B.1		1988-01-01	No Photo Available
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	2001-01-01	 © 2005 Dean Wm Taylor
Tropidocarpum capparideum	caper-fruited tropidocarpum	Brassicaceae	annual herb	Mar-Apr	None	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available

Showing 1 to 29 of 29 entries

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Suggested Citation:

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 6 May 2025].
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Appendix E

2017 USFWS Framework for Assessing Impacts to VELB

Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle

(*Desmocerus californicus dimorphus*)



May 2017

Service Contact

The Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (Framework) was prepared by the U.S. Fish and Wildlife Service's Sacramento Fish and Wildlife Office. If you have questions regarding the Framework, please call (916) 414-6600. To download a copy of the Framework please visit: https://www.fws.gov/sacramento/documents/VELB_Framework.pdf

Suggested Citation

U.S. Fish and Wildlife Service. 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.

1.0 Introduction

The U.S. Fish and Wildlife Service (Service) is issuing this Framework to assist Federal agencies and non-federal parties in evaluating the potential effects of their projects on the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB), listed as threatened under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act). This framework can be consulted during the development of any project that may affect VELB or its habitat. It is intended to help project applicants assess potential effects to the VELB and develop measures to avoid, minimize, and compensate for adverse effects to the species or its habitat. It may also help determine whether those projects will require incidental take authorization through a section 7 consultation or a section 10(a)(1)(B) permit. Proposed projects that will have large landscape level impacts, are likely to provide a net conservation benefit, or will involve riparian restoration may need a different or more detailed analysis than what is provided here. Applicants and agencies proposing these, or similar types of projects, should discuss the project with the Service early in the planning process. The Framework may still provide guidance for an effects analysis, but these projects may exercise more flexibility when implementing conservation measures and compensation.

The primary goal of this document is to articulate a conceptual ecological model for the species. This framework represents the Sacramento Fish and Wildlife Office's current analytical approach for evaluating and assessing adverse effects to the VELB. It will be updated as new information becomes available. As always, the Service welcomes dialog and discussion with our partners in assessing impacts for particular projects and encourages project proponents to consult with the Service early in project development whenever possible.

The VELB is protected under the Act wherever it is found. Visual surveys for the VELB, which includes looking for adults and/or exit holes, are currently the only approved method of surveying for the species and are not entirely reliable for determining presence or absence (see below). Visual surveys, habitat assessments, and mitigation site monitoring do not require a section 10(a)(1)(A) recovery permit. Inquiries about other survey methods, recovery permits, and research should be directed to the Listing and Recovery Division at (916) 414-6600.

1.1 Previous Federal Actions

The VELB was listed as a threatened species under the Act on August 8, 1980 (Federal Register 45: 52803-52807). Concurrent with the final listing rule, two areas in Sacramento County were designated as critical habitat for the VELB (Appendix A). The first area, referred to as the "Sacramento Zone", is enclosed by California State Route 160 to the north, the Western Pacific railroad tracks to the west/southwest, and by Commerce Circle to the east. The second area, referred to as the "American River Parkway Zone", is actually two separate areas along the south bank of the American River in Rancho Cordova. A recovery plan for VELB was completed on June 28, 1984; however, due to a lack of information regarding VELB life history, distribution, and habitat requirements, the recovery plan

only described interim actions and not precise recommendations (Service 1984). For more information about VELB, its designated critical habitat, and the VELB recovery plan, please visit: https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=7850.

On September 10, 2010, the Service was petitioned to delist the VELB and on August 19, 2011, the Service responded with a 90-day finding that determined the petition contained substantial information indicating that delisting VELB may be warranted (Federal Register 76: 51929-51931). On October 2, 2012, the Service published a proposed rule to delist VELB and to remove the species' critical habitat designation (Federal Register 77: 60238-60276). However, after receiving additional information regarding VELB, the Service did not delist the species and published the September 17, 2014, Withdrawal of the Proposed Rule to Remove the Valley Elderberry Longhorn Beetle From the Federal List of Endangered and Threatened Wildlife (Federal Register 79: 55874-55917) (Withdrawal Rule). The August 8, 1980, final listing rule and the Withdrawal Rule both described habitat loss as the primary threat to the species.

2.0 Life History

The VELB is a small (0.5 - 0.8 in.) wood-boring beetle in the *Cerambycid* family. It is sexually dimorphic and the females are indistinguishable from the more widespread California elderberry longhorn beetle (*Desmocerus californicus californicus*). Elderberry shrubs (*Sambucus* spp.) are the obligate larval host plants for the VELB (Collinge et al. 2001, Holyoak 2010) and their larvae go through several developmental stages (instars) within the elderberry shrub (Greenberg 2009). Eggs are laid individually on leaves or at the junctions of the leaf stalk and main stem (Barr 1991). Upon hatching, the larvae bore into the elderberry stem (Halstead and Oldham 1990) and create feeding galleries in the pith (Burke 1921, Barr 1991). Prior to pupation, the larvae creates an exit hole, plugs the hole with wood shavings, and returns to the gallery where it pupates (Halstead and Oldham 1990). Approximately 1 month later, the adult beetle emerges from the stem through the previously created exit hole (Burke 1921). Adult emergence, mating, and egg-laying, occurs in the spring and summer (March to July), typically coinciding with the elderberry flowering period (Burke 1921, Halstead and Oldham 1990). Under laboratory conditions, adult males typically live 4 to 5 days, while females can live up to 3 weeks (Arnold 1984). The only identifiable exterior evidence of elderberry use by VELB is the exit hole created by the larvae.

3.0 Range and Habitat Description

The VELB is protected wherever found. The current presumed range extends throughout the Central Valley (https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=7850). The range extends from approximately Shasta County in the north to Fresno County in the south including the valley floor and lower foothills. The majority of VELB have been documented below 152 meters (500 feet) in elevation. Areas above 152 meters (500 feet) with suitable habitat and known VELB occurrences in that drainage may contain VELB populations in certain circumstances. The Service can assist in determining the likelihood of occupancy above 500 feet.

3.1 Habitat

Historically, the Central Valley had large (3.2-8.0 km wide), undisturbed expanses of riparian vegetation associated with the watersheds that drained the west side of the Sierra Nevada Mountains and the east side of the Coast Mountain Range. These watershed systems were highly dynamic and their floodplains supported a wide corridor of riparian vegetation (Katibah 1984) in a diverse mosaic of structures and species assemblages from early successional to mature gallery forest (Gilbart 2009).

During the last 150 years California's Central Valley riparian forests have experienced extensive vegetation loss due to expansive agricultural and urban development (Katibah 1984), and in many places, have dwindled to discontinuous, narrow corridors. Natural areas bordering the rivers, which once supported vast tracts of riparian vegetation, became prime agricultural land (Thompson 1961). As agriculture and urbanization expanded in the Central Valley, needs for increased water supply and flood protection spurred water development and reclamation projects. Artificial levees, river channelization, dam building, water diversion, and heavy groundwater pumping have further reduced riparian vegetation to small, isolated fragments (Katibah 1984). In many places, flood control levees have been installed adjacent to and parallel with the river, effectively sectioning the riparian forest habitat into discrete communities on either side of the levee. In recent decades, riparian areas in the Central Valley have continued to decline as a result of ongoing agricultural conversion, urban development, stream channelization and channel hardening.

Elderberry shrubs are common in the Central Valley where they grow naturally in a variety of riparian and non-riparian vegetative communities (Vaghti and Greco 2007). Most elderberry presence within the Central Valley is determined by broad scale hydrologic regimes such as the relative elevation of floodplain and floodplain width, and secondarily by sediment texture and topography (Fremier and Talley 2009). Elderberry shrubs are most common on higher and older riparian terraces, where the roots of the plant are able to reach the water table and where the plants are not inundated for long periods (Talley 2005; Vaghti et al. 2009). Elderberry shrubs can be found on historic floodplain terraces above the river, on levees (both on the river and land sides), and along canals, ditches, and areas where subsurface flow provides water to elderberry roots. Elderberry shrubs typically occur in most vegetation communities that occupy historic and current floodplains and terraces, to the top of channel walls in deeply incised rivers (i.e., the Tuolumne and Stanislaus Rivers), and to the top of and on the land-side of levees where woody plants create savannas or patchy woodlands. Elderberry can be a canopy or subcanopy species depending on the hydrology, vegetation composition, or disturbance at a particular site and it can occur as individual shrubs, clumps, clusters, and groves. In non-riparian settings, elderberries occur either singly or in groups in valley oak and blue oak woodland and annual grasslands. It is not known whether elderberries in this setting are also associated with a shallow water table or other shallow water sources. In natural areas, elderberry shrubs have also been shown to grow best with little canopy cover from associated vegetation (Talley 2005).

The historic distribution of the VELB closely matched the distribution of the elderberry host plant, which was patchily found throughout the Central Valley riparian forests and occasionally adjacent uplands (non-riparian). The Service recognizes habitat for VELB as including both riparian and non-riparian areas where elderberry shrubs are present. Riparian habitat includes all areas that are either influenced by surface or subsurface water flows along streams, rivers, and canals (including the landside of levees) and areas that have the vegetation communities similar to those defined below.

Riparian vegetation communities within the California Central Valley can be described as valley-foothill forest habitat, which includes many different forest associations. Non-riparian habitat includes valley oak and blue oak woodland and annual grassland. The following habitat descriptions have been adapted from Mayer and Laudenslayer (1988) (https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats).

Within California, valley-foothill riparian habitats occur in the Central Valley and the lower foothills of the Cascade, Sierra Nevada, and Coast mountain ranges. Riparian habitats show a wide range of both species and structural diversity. The valley-foothill riparian habitat is found in association with riverine, grassland, oak woodland, and agricultural habitats. Canopy height is about 30 meters in a mature riparian forest, with a canopy cover of 20 to 80 percent. Most trees are winter deciduous. There is a subcanopy tree layer and an understory shrub layer. Wild grapes (*Vitis californica*) frequently provide up to 50 percent of the ground cover and festoon trees to heights of 20-30 meters. Herbaceous vegetation constitutes about one percent of the cover, except in open areas where tall forbs and shade-tolerant grasses occur. Many non-native invasive species can also be found, and are sometimes common, in riparian habitat. Oak woodland, oak savanna, and elderberry savanna can occur as both riparian and non-riparian communities.

Dominant riparian canopy layer species include cottonwood (*Populus* sp.), California sycamore (*Platanus racemosa*), willow (*Salix* spp.) black walnut (*Juglans* spp.) and valley oak (*Quercus lobata*). Subcanopy trees include boxelder (*Acer negundo*) and Oregon ash (*Fraxinus latifolia*), and typical understory shrub layer plants include wild grape, wild rose (*Rosa* sp.), blackberry (*Rubus* sp.), poison oak (*Toxicodendron diversilobum*), and buttonbush (*Cephalanthus occidentalis*), and willows. The herbaceous layer consists of sedges (*Carex* sp.), rushes, grasses, miner's lettuce (*Claytonia* sp.), mugwort (*Artemisia* sp.), poison-hemlock (*Conium maculatum*), and hoary nettle (*Urtica dioica*). Many non-native woody species occur with elderberry including tree-of-heaven (*Ailanthus altissima*) and black locust (*Robinia pseudoacacia*)

Elderberry shrubs can be a common understory plant in both non-riparian valley oak and blue oak woodland habitats. Valley oak woodland is generally found at lower elevations than blue oak woodlands, but the two habitat types transition into each other in the lower foothill regions. Annual grasses and forbs dominate the herbaceous layer in both woodland habitat types (Mayer and Laudenslayer 1998) and both intergrade with annual grassland. Valley oak woodland can occur from savanna-like conditions to denser forest-like conditions, with tree density tending to increase along

natural drainages. Valley oak woodlands are almost exclusively dominated by valley oak, but may also contain sycamore, black walnut, blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizeni*), and boxelder. Understory shrubs may include species such as, wild grape, toyon (*Heteromeles arbutifolia*), and California coffeeberry (*Frangula californica*). Blue oak woodlands can also occur from savanna-like conditions to denser forest-like conditions with a nearly closed canopy. Blue oak woodland is comprised of 85 to 100 percent blue oak trees, but may contain interior live oak and valley oak.

Common shrub associates include poison-oak, California coffeeberry, buckbrush (*Ceanothus cuneatus*), California buckeye (*Aesculus californica*), and manzanita (*Arctostaphylos* sp.). Within both of these habitats, elderberry may be found in the understory as well as in small clumps within the upland savanna. Elderberry shrubs are also often found away from riparian areas where ditches, irrigation, groundwater, or other features allow the plant to receive enough moisture and as ornamental plantings in regularly maintained landscaped areas.

3.1.1 Use of Riparian Habitat

Research suggests that the VELB occurs throughout the Central Valley in metapopulations (Collinge et al. 2001). Metapopulations are defined as a system of discrete subpopulations that may exchange individuals through dispersal or migration (Breininger et al. 2012, Nagelkerke et al. 2002). The VELB metapopulation occurs throughout contiguous intact riparian habitat as subpopulations that shift spatially and temporally within drainages, resulting in a patchwork of occupied and unoccupied habitat. Removal of suitable habitat (whether occupied or unoccupied) can increase the distance between occupied and unoccupied patches. Because its physical dispersal capability is limited, this fragmentation decreases the likelihood of successful colonization of unoccupied habitat (Collinge et al. 2001). As a consequence, the subpopulations are more vulnerable to stochastic events that may reduce or eliminate the subpopulation. The loss of multiple subpopulations can have an adverse impact on the long-term persistence and health of the metapopulation. Therefore, maintaining contiguous areas of suitable habitat is critical for maintaining the VELB.

At the local level, it appears that much of the variation in VELB occupancy of elderberry shrubs results from variables such as elderberry condition, water availability, elderberry density, and the health of the riparian habitat (Talley et al. 2007). This research indicates that healthy riparian systems supporting dense elderberry clumps are the primary habitat of VELB (Barr 1991, Collinge et al. 2001, Talley et al. 2006, Talley et al. 2007). Elderberry shrubs typically have a clumped distribution across the landscape (Figure 1) although they can occur singly. Upon emergence, VELB typically stay within the local clump (Talley et al 2007). Talley et al. (2007) found that much of the time, distances between stems with exit holes averaged 25-50 meters (65-165 feet) apart. At larger scales, average distances between these occupied clumps ranged from 200 meters (656 feet) up to 800 meters (2,625 feet) (Figure 1).

Because the elderberry is the sole host plant of the VELB, any activities that adversely impact the elderberry shrub may also adversely impact the VELB. Adverse impacts to elderberry shrubs can occur

either at a habitat scale or at an individual shrub scale. Activities that reduce the suitability of an area for elderberry plants or elderberry recruitment and increase fragmentation may have adverse impacts to mating, foraging, and dispersal of VELB. The patchy nature of VELB habitat and habitat use makes the species particularly susceptible to adverse impacts from habitat fragmentation.

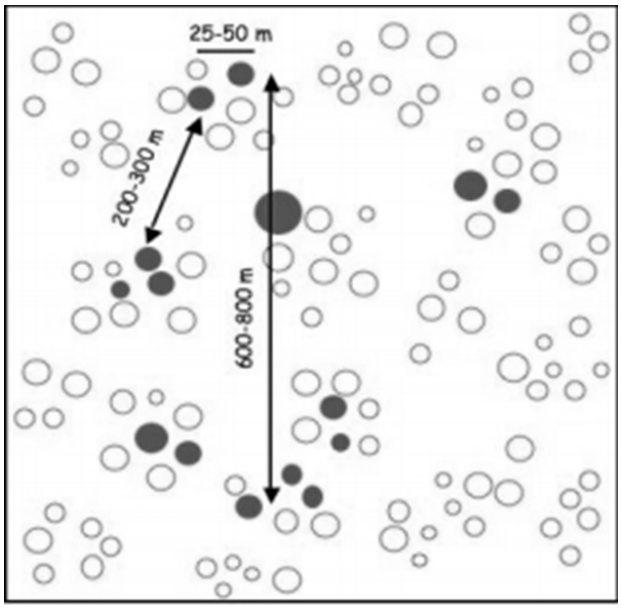


Figure 1. Schematic diagram of the spatial population structure of the valley elderberry longhorn beetle. Open circles represent unoccupied elderberry shrubs, closed circles are occupied by the valley elderberry longhorn beetle. Aggregation sizes and distances used are those found on the American River Parkway, where occupied clumps are approximately 25-50 meters apart, distances between aggregations of occupied clumps are approximately 200-300 meters, and the extent of the cluster of aggregations is 600-800 meters (Talley et al. 2006).

Determining whether an individual plant or clump is occupied by VELB can be challenging. Often the only external evidence that a VELB is present is the small exit hole made by the larva as it leaves the stem. Traditional exit hole surveys can help identify the past use of a particular shrub by VELB, but not its current occupancy. This difficulty makes assessing the likelihood of presence of individual VELB difficult. However, Talley et al. (2007) found that 73% of shrubs with old exit holes also had new exit holes, indicating that presence of an exit hole in the shrub increases the likelihood that that shrub or nearby shrubs are occupied. Therefore, impacts to individual shrubs with exit holes are reasonably likely to result in impacts to individual VELB, but the likelihood of adverse effects may not always be ascertained simply by the presence of exit holes (or the lack of). A more thorough analysis of nearby occurrences, surrounding habitat, and elderberry density is needed to fully address adverse impacts. In general, because of the difficulty in detecting VELB, the patchy nature of its distribution, and the importance of unoccupied habitat to maintain connectivity between VELB metapopulations, any

impacts to riparian habitat with elderberry shrubs present are likely to result in adverse effects to VELB.

3.1.2 Use of Non-Riparian Habitat

Much of the existing research has focused on the VELB's use of riparian habitat. In non-riparian habitats, a patchwork of individual shrubs provides opportunity for VELB occupancy, but it is unknown if the movement and distribution patterns remain consistent with the patterns found in riparian areas. In non-riparian areas, adverse effects to of VELB are likely to occur as a result of impacts to any elderberry shrub with exit holes, and adverse effects may result from disturbance to elderberry shrubs reasonably close to riparian areas or known VELB populations.

4.0 Occupancy Determination in Non-Riparian Habitat and Appropriate Surveys

The decision tree shown in Figure 2 is used by the Sacramento Fish and Wildlife Office to assess the effect of any proposed project on the VELB. It is recommended that proposed project sites within the range of the VELB be surveyed by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are found on or within 50 meters (165 feet) of the project site, we recommend that the habitat be assessed to determine if the project area is in riparian or non-riparian habitat. Depending on the size, duration and/or type of proposed project, the larger area surrounding the project site may also be surveyed for the presence and number of elderberry shrubs.

If the project site is non-riparian and contains elderberry shrubs, we use exit hole surveys to evaluate the site for potential occupancy. Exit hole surveys are not essential in riparian areas, but may be conducted in order to assess the level and significance of adverse effects. The presence of exit holes in a shrub increases the likelihood that the shrub is occupied by VELB; however, a lack of exit holes does not preclude occupancy by the VELB. In the absence of exit holes we recommend that a biologist evaluate the project area using the following criteria (also shown in Figure 2):

1. Is there a riparian area, elderberry shrubs, or known VELB records within 800 meters (2,526 feet) of the proposed project?

   Isolated, non-riparian elderberry clumps are less likely to be occupied or become colonized by VELB and those beyond 800 meters (2,526 feet) from the nearest elderberry clump become increasingly less likely to be occupied. Therefore, a qualified biologist can assess the distance of the elderberry shrub from the nearest riparian area, elderberry shrub, and known occupied elderberry location.

2. Was the site continuous with a historical riparian corridor?

   Fragmentation of riparian corridors in the Central Valley has resulted in the isolation of elderberry shrubs or clusters that may provide important linkages between or within riparian corridors. A qualified biologist can evaluate the project location in the context of the historical riparian system. Isolated elderberry clumps that were part of a historic riparian vegetative community may still support VELB.

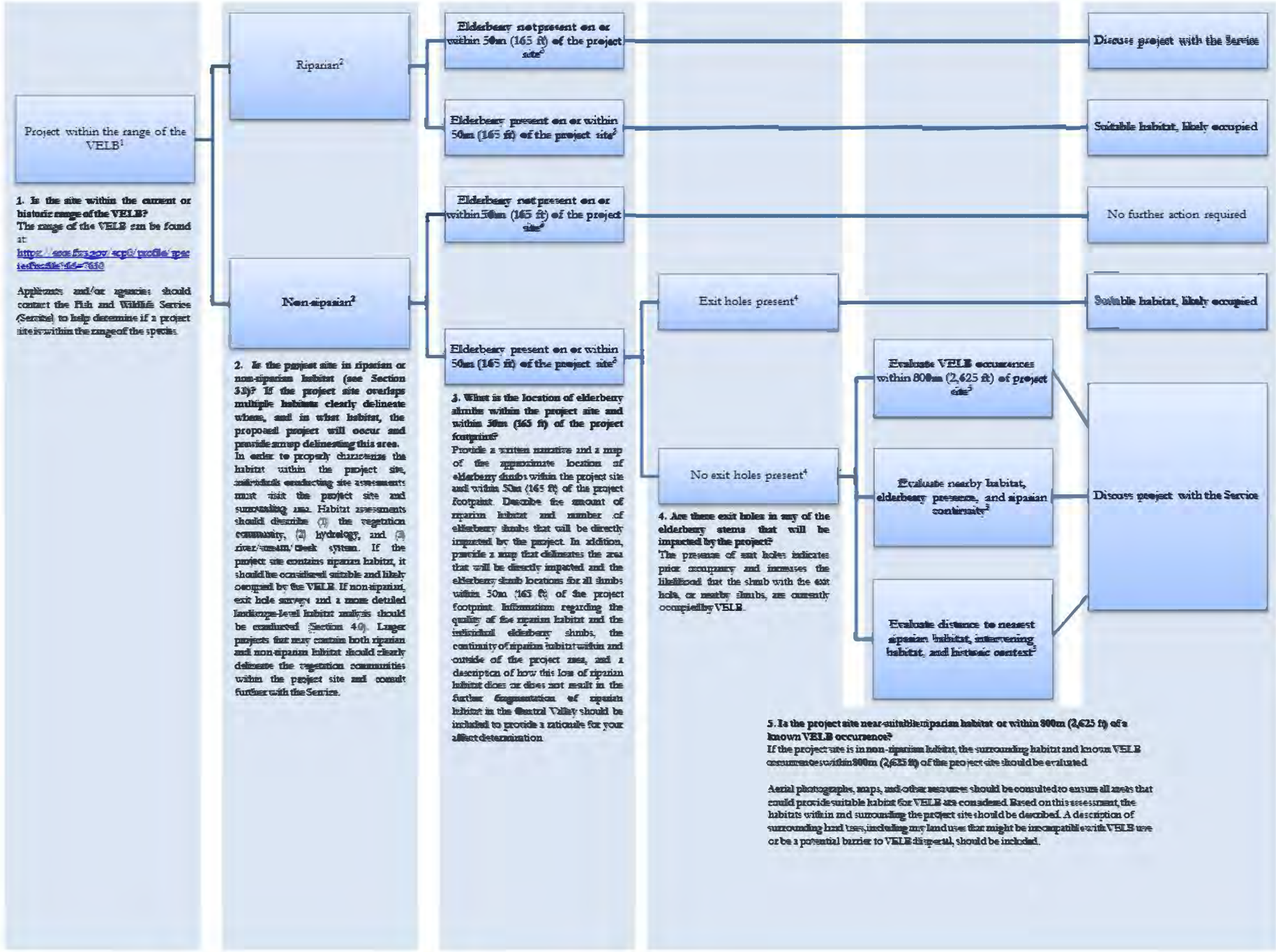


Figure 2. Decision tree to determine the likelihood of a particular elderberry shrub being occupied by valley elderberry longhorn beetle.

5.0 Conservation Measures

We encourage the development of proposed project designs that avoid riparian habitat and/or elderberry shrubs whenever possible. If elderberry shrubs occur on or within 50 meters (165 feet) of the project area, adverse effects to VELB may occur as a result of project implementation. If the project may affect VELB or its habitat, appropriate avoidance and minimization measures are recommended.

5.1 Avoidance and Minimization Measures

The following measures are recommended for incorporation into a proposed project to avoid and minimize effects to VELB and/or its habitat. Not all measures may be appropriate for every project, and agencies/applicants should coordinate with the Service to determine which measures may be needed. The text in this section and Section 5.2 is intended to provide language that may be used by agencies/applicants to describe avoidance and minimization measures for their proposed project.

Fencing. All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible.

Avoidance area. Activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) may need an avoidance area of at least 6 meters (20 feet) from the drip-line, depending on the type of activity.

Worker education. A qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for non-compliance.

Construction monitoring. A qualified biologist will monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring will depend on the project specifics and should be discussed with the Service biologist.

Timing. As much as feasible, all activities that could occur within 50 meters (165 feet) of an elderberry shrub, will be conducted outside of the flight season of the VELB (March - July).

Trimming (See 5.3). Trimming may remove or destroy VELB eggs and/or larvae and may reduce the health and vigor of the elderberry shrub. In order to avoid and minimize adverse effects to VELB when trimming, trimming will occur between November and February and will avoid the removal of any branches or stems that are ≥ 1 inch in diameter. Measures to address regular and/or large scale maintenance (trimming) should be established in consultation with the Service.

Chemical Usage. Herbicides will not be used within the drip-line of the shrub. Insecticides will not be used within 30 meters (98 feet) of an elderberry shrub. All chemicals will be applied using a backpack sprayer or similar direct application method.

Mowing. Mechanical weed removal within the drip-line of the shrub will be limited to the season when adults are not active (August - February) and will avoid damaging the elderberry.

Erosion Control and Re-vegetation. Erosion control will be implemented and the affected area will be re-vegetated with appropriate native plants.

5.2 Transplanting

In order to protect VELB larvae to the greatest extent possible, we recommend that all elderberry shrubs with stems greater than 1 inch in diameter be transplanted under the following conditions:

1. If the elderberry shrub cannot be avoided.
2. If indirect effects will result in the death of stems or the entire shrub.

Removal of entire elderberry plants without disturbance to the surrounding habitat is uncommon, but may occur on certain projects. The removal may either include the roots or just the removal of the aboveground portion of the plant. We encourage project applicants to attempt to remove the entire root ball and transplant the shrub, if possible. In order to minimize the fragmentation of VELB habitat, the Service encourages applicants to relocate elderberry shrubs as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the project proponent is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate Service-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The following transplanting guidelines may be used by agencies/applicants in developing their VELB conservation measures:

Monitor. A qualified biologist will be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.

Exit Holes. Exit-hole surveys will be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted will be reported to the Service and to the California Natural Diversity Database (CNDDB).

Timing. Elderberry shrubs will be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the shrub and increase transplantation success.

Transplanting Procedure. Transplanting will follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (http://www.tcia.org/).

Trimming Procedure. Trimming will occur between November and February and should minimize the removal of branches or stems that exceed 1 inch in diameter.

5.3 Impacts to Individual Shrubs

In certain instances, impacts to elderberry shrubs, but not the surrounding habitat may occur. This could take the form of trimming or complete removal of the plant. Trimming elderberry shrubs may result in injury or death of eggs, larva, or adults depending on the timing and extent of the trimming. Since the larva feed on the elderberry pith while they are developing, any trimming that could affect the health of the plant and cause the loss of stems may kill any larva in those stems. No adverse impacts to the VELB will occur if trimming does not remove stems/branches that are ≥1 inch in diameter and is conducted between November and February. Trimming that occurs outside of this window or removes branches ≥ 1 inch in diameter may result in adverse effects to VELB. In order to assess the risk of take from trimming activities, we recommend the following be evaluated:

1. Conduct an exit hole survey on the plant
2. Evaluate the surrounding habitat (riparian vs. non-riparian).
3. Evaluate the potential suitability of the plant to provide VELB habitat.
    a. Riparian plants are much more likely to be occupied or colonized by VELB.
    b. Plants in non-riparian locations should be evaluated using the criteria in Figure 2.

6.0 Compensatory Mitigation

For all unavoidable adverse impacts to VELB or its habitat, we recommend that lead agencies and project applicants coordinate with the Service to determine the appropriate type and amount of compensatory mitigation. For plants in riparian areas, compensation may be appropriate for any impacts to VELB habitat. In non-riparian areas, compensation is typically appropriate for occupied shrubs (Figure 2). Appropriate compensatory mitigation can include purchasing credits at a Service-approved conservation bank, providing on-site mitigation, or establishing and/or protecting habitat for VELB.

It is recommended that the permanent loss of VELB habitat be replaced with habitat that is commensurate with the type (riparian or non-riparian) and amount of habitat lost. Suitable riparian habitat may be replaced, at a minimum of 3:1 for all acres that will be permanently impacted by the project (Table 1). Suitable non-riparian habitat may be replaced, at a minimum of 1:1 for all acres that will be permanently impacted by the project (Table 1). We typically recommend that any shrub that will be adversely impacted by the project be transplanted to a Service-approved location.

We encourage agencies and/or applicants to propose appropriate compensation for all individual shrubs that will be impacted by the project. Strong compensation proposals consider the location of the plant (riparian or non-riparian) and the potential for the plant to be occupied by VELB (exit

holes present, likely occupied). Projects that only directly affect individual shrubs may consider replacing habitat based on the amount of effects that occur, the location of the shrub (riparian or non-riparian), and the presence of exit holes (non-riparian only) (Table 2). Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a Service-approved bank for each shrub that will be trimmed regardless of the presence of exit holes. If the shrub will be completely removed by the activity, the entire shrub may be transplanted to a Service-approved location in addition to the credit purchase. We recommend impacts to individual shrubs in non-riparian areas be replaced through a purchase of 1 credit at a Service-approved bank for each shrub that will be trimmed if exit holes have been found in any shrub on or within 50 meters (165 feet) of the project area. If the shrub will be completely removed by the activity, we suggest that the entire shrub be transplanted to a Service-approved location in addition to a credit purchase.

Table 1. Potential Valley Elderberry Longhorn Beetle Habitat-Level Compensation Examples

Habitat	**Compensation Ratio** [1]	**Total Acres of Disturbance**	**Acres of Credits**	**Total Credit Purchase** [2]
Riparian	3:1	1.2 acres	3.6 acres	87.8
Non-riparian	1:1	0.5 acre	0.5 acre	12.1

[1] acre(s) of credits: acre(s) of disturbance

[2] One credit (unit) = 1,800 sq. ft.

Table 2. Valley Elderberry Longhorn Beetle Shrub-Level Impact Compensation

Habitat	**Compensation Ratio**[1]	**If the entire shrub will be removed**
Riparian	2:1	Transplant the shrub + 2:1 compensation
Non-riparian (exit holes present)	1:1	Transplant the shrub + 1:1 compensation

[1] number of credits: number of shrubs trimmed

[2] One credit (unit) = 1,800 sq. ft. or 0.041 acre

The compensation scenarios in Table 1 are examples of the amount of habitat (riparian or non-riparian) that may be appropriate to compensate for a project's adverse impacts. Additional examples can be found in Appendix B. The amount of compensation deemed appropriate to offset effects to VELB will take into consideration the effects of the project and desired conservation outcome. The compensation examples in this Framework are for illustrative purposes only. Alternative methods for determining compensation should be coordinated with the Service. Currently, compensation at Service-approved VELB banks is partitioned into 1,800 sq. ft. basins.

Under this scheme, a single credit equals 1,800 sq. ft. or 0.041 acres. In order to calculate the total compensation credits needed for impacts to VELB, the total amount of disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800.

We recommend that any project that occurs in suitable habitat (riparian or non-riparian) compensate for that loss in proportion to the total amount of habitat that will be disturbed as a result of project implementation. The acreage of habitat lost can be assessed based on all permanent surface disturbance including access routes and staging areas.

6.1 Compensatory Mitigation Proposals

If the lead agency or applicant is not purchasing credits at a Service-approved bank, they may compensate for habitat loss through on- or off-site mitigation. The Service has issued interim standards for the long-term management and protection of mitigation sites (https://www.fws.gov/endangered/improving_esa/). Those proposing on-site compensation, off-site habitat creation/enhancement, or those proposing to create a Service-approved conservation bank should work closely with the Service during the planning and development process. It is recommended that all plans adhere to the following criteria that are specific to VELB:

Site Selection and Development. Proposals using a strategic approach to ecosystem protection and restoration that will promote VELB metapopulation dynamics are preferred. Criteria for a suitable mitigation site may include abiotic factors such as soils, water availability, and prior land use as well as the proximity of the site to existing riparian habitat and known VELB records. Appropriate site selection is critical for achieving conservation success. A site that has incompatible soils or hydrology may not be able to meet the success criteria. Proposals that protect or enhance existing riparian habitat are preferred and the proposal should detail what, if any, measures will be needed to restore the site to ensure that it is suitable for elderberry survival.

Planting Plan. We recommend all proposals be designed to meet the desired distribution and density for elderberry shrubs and native associates that will be planted at the mitigation site in accordance with 1-3 below. The planting plan should be specific to the site and factors that will influence the success of the elderberry and native associate plantings. The plan should seek to establish a diverse natural riparian community with a complex vegetation structure. Native associates should include a mix of woody trees, shrubs, and other natives appropriate for the site. Stock of either seedlings or cuttings should be obtained from local sources. The number of elderberry and native associate plantings should be based on the desired distribution and density outcome proposed in the planting plan. The Service encourages planting plans that promote spatial and structural diversity within the mitigation site. We recommend planting plans be designed to meet the following goals:

1. Maximize the number of stems between 2 (0.8 inches) and 12 centimeters (4.7 inches). Talley et al. (2007) found stems within this size range had the largest proportion of VELB exit holes.
2. Minimize competition for sunlight and water. Native associates, particularly trees, can influence the long-term success of the mitigation site. Native associates should be planted at a ratio of 1 native associate for every 3 elderberry plants to avoid competition for sunlight and water with the elderberry plantings.
3. Achieve an average elderberry stem density of 240 stems/acre. This was the average stem density Vaghti et al. (2009) found for elderberry shrubs along the major river systems within the VELB range. The Service and lead agency or applicant should assess this goal after 5 years.

Buffer. A buffer area may be needed between the mitigation site and adjacent lands, depending on adjacent land-use. An appropriate buffer distance can be developed in coordination with the Service when proposing compensation. Although the buffer would be considered part of the mitigation site, the acreage of the buffer may not be considered compensation.

Success Standards. We recommend that the site management plan and/or planting plan specify timelines for achievement of the success standards for the site, as stated below. These timelines should reflect the impacts that the site is intended to compensate for, the specific abiotic factors at the site that could influence establishment, or any credit release criteria that need to be met. Standards for VELB mitigation banks can be found in Appendix C. These standards were developed specifically for mitigation banks, but can be broadly applied to all compensatory mitigation for VELB. Some of the timelines described in the standards may not be applicable in all situations, but agencies and applicants should work with the Service to develop success standards that best meet the goals of their individual compensatory mitigation proposal. We suggest that all compensatory mitigation meet the following:

1. A minimum of 60% of the initial elderberry and native associate plantings must survive over the first 5 years after the site is established. As much as feasible, shrubs should be well distributed throughout the site; however, in some instances underlying geologic or hydrologic issues might preclude elderberry establishment over some portion of the site. If significant die back occurs within the first 3 years, replanting may be used to meet the 60% survival criteria. However, replanting efforts should be concentrated to areas containing surviving elderberry plants. In some instances overplanting may be used to offset the selection of a less suitable site.
2. After 5 years, the site must show signs of recruitment. A successful site should have evidence of new growth on existing plantings as well as natural recruitment of elderberry. New growth is characterized as stems < 3 cm (1.2 inches) in diameter. If

no signs of recruitment are observed, the agency or applicant should discuss possible remedies with the Service.

Monitoring. Specific monitoring protocols and reporting timelines for the mitigation site should be developed in coordination with the Service. The population of VELB, the general condition of the mitigation site, and the condition of the elderberry and associated native plantings in the mitigation site should be monitored at appropriate intervals. In any survey year, a minimum of two site visits between February 14 and June 30 of each year must be conducted by a Service-approved biologist. Surveys must include:

1. A search for VELB exit holes in elderberry stems, noting the precise locations and estimated ages of the exit holes. The location of shrubs with exit holes should be mapped with a GPS. Because adult VELB are rarely encountered, targeted surveys for adults are not required. However, surveyors should record all adult VELB seen. Record photographs should be taken for all observations of adult VELB and their location mapped with a GPS. All exit hole or adult VELB observations should be reported to CNDDB.
2. An evaluation of the success standards outlined above.
3. An evaluation of the adequacy of the site protection (fencing, signage, etc.) and weed control efforts in the mitigation site. Dense weeds and grasses such as Bermuda grass (*Cynodon dactylon*) are known to depress elderberry recruitment and their presence should be controlled to the greatest extent practicable.
4. An assessment of any real or potential threats to VELB and its host plant, such as erosion, fire, excessive grazing, off-road vehicle use, vandalism, and excessive weed growth.
5. A minimum of 10 permanent photographic monitoring locations should be established to document conditions present at the mitigation site. Photographs should be included in each report.

Reports. A reporting timeline should also be developed during the development of monitoring protocols for the mitigation site. Reports submitted to the Service should present and analyze the data collected from the monitoring surveys. Copies of original field notes, raw data, photographs, and a vicinity map of the site (including any adult VELB sightings and/or exit hole observations) of the mitigation site must be included with the report. Copies of the report (including any applicable Service file number) must be submitted within 6 months of the survey to the Service (Field Supervisor) at the following address:

U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, CA 95825.

7.0 Other Activities

The Framework may not be applicable for restoration, floodway maintenance, and other large scale habitat modification activities. These activities and the potential effects to VELB and its habitat should be considered on a project-by-project basis and discussed with the Service. We recommend that project proponents consider the effects to the species on a landscape level and ultimately seek to protect, preserve, and restore the continuity of VELB habitat. These and similar activities that may adversely impact the VELB and its habitat at landscape scales should consider avoidance, minimization, and compensation strategies that are appropriate for the specific project. Compensation may not be appropriate for those projects that impact only individual elderberry shrubs or result in a net benefit to VELB. Some possible conservation measures to consider for these large scale projects include:

1. Transplanting all affected elderberries to a similar on-site location.
2. Maintaining patches of appropriate habitat in areas where large-scale removal of elderberry shrubs will occur.
3. Scale trimming, removal, and other activities that allow VELB to persist within the area.

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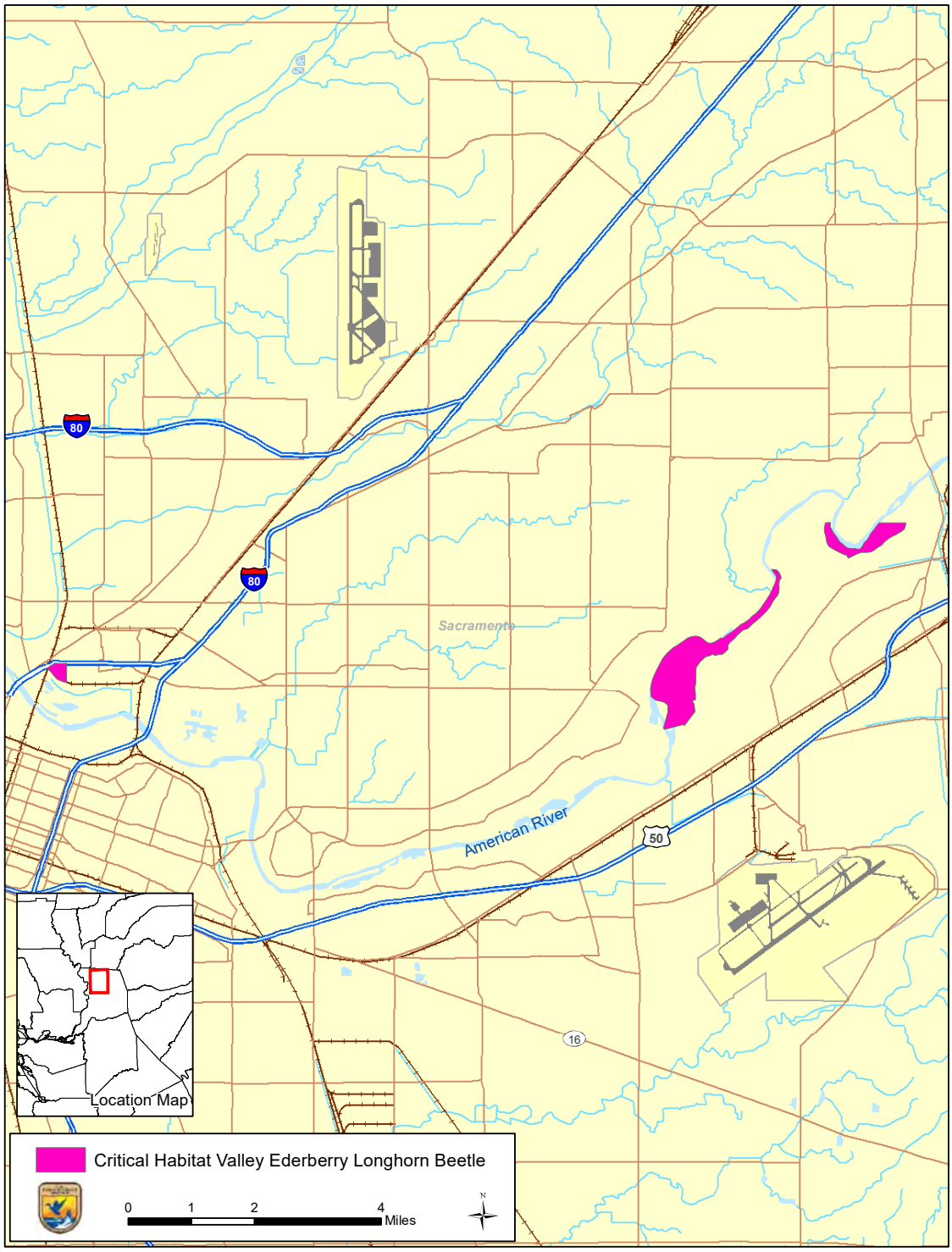
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Appendix A. Valley Elderberry Longhorn Beetle Critical Habitat



Appendix B. Compensation Examples

#1. An applicant is proposing to repair a bridge over Putah Creek. The project will require excavation within the channel and a re-contour of approaches to the new bridge. Pre-construction surveys noted that 3 elderberry shrubs in riparian habitat were within the project area, 2 of these shrubs will be directly impacted by the excavation work. The third shrub will be avoided using the appropriate avoidance and minimization measures. During the project, 0.5 acre of riparian habitat will need to be removed. The applicant has proposed to transplant the 2 directly affected elderberry shrubs to a Service-approved conservation bank and purchase 1.5 acres of credits at the conservation bank.

> Conclusion: The project contains 3 elderberry shrubs on or within 50m of the project area. The project will result in the fragmentation of riparian habitat through the loss of 0.5 acres of riparian habitat. The compensation of 3:1 is appropriate for this project because it will be removing riparian habitat. The transplanting of the shrubs is appropriate because they would be directly impacted by the project.

#2. A new bike path will be constructed through an oak woodland/elderberry savanna. Pre-construction surveys identified one elderberry shrub within 0.10 acre of oak woodland/elderberry savanna that will be adversely affected by the proposed action. Exit holes were found on the elderberry shrub. The applicant also identified a conservation area that is suitable for oak woodland/elderberry savanna. Associated natives adjacent to the conservation area are blue oak (Q. douglasii), interior live oak, sycamore, poison oak, and wild grape. The applicant and the Service have agreed that transplanting the elderberry shrub into the conservation area and planting the conservation area with non-riparian habitat at a 1:1 ratio is appropriate to off-set the impacts to the VELB from the construction of this project.

> Conclusion: The project contains 1 elderberry shrub on or within 50m of the project area. The project will result in the loss of 0.10 acre of non-riparian, elderberry savanna habitat. The proposed compensation of planting the identified conservation area at a 1:1 ratio using the species listed above is appropriate for the project since it will be removing non-riparian habitat. The transplanting of the one shrub into the conservation area is appropriate because it will be directly impacted by the project and the presence of exit holes suggests it was recently occupied by VELB.
>
> The total area required for the conservation plantings are a minimum of 1,800 sq. ft. for one to five elderberry seedlings and up to 5 associated natives. A total of 0.10 acre (1 x 0.10 = 0.10 acre = 4,356 square feet) will be required for the plantings. The conservation area will be seeded and planted with native grasses and forbs, and closely monitored and maintained throughout the monitoring period (see Section 5).

#3. Construction of a cell tower will require the removal of two isolated elderberry shrubs and the temporary loss of a minimal amount of grassland habitat. The project location is 3 miles east of the Feather River. The project site is not near a water course or any other shrubs within 800m. The shrubs were surveyed and do not exhibit exit holes.

> Conclusion: The project area contains two non-riparian shrubs on or within 50m of the project area. Since both shrubs lack exit holes, other factors need to be considered to determine the likeliness of occupancy. A review of occurrence data reveals there are no known VELB occurrences within 800m of the project site and historical imagery shows the project site has never been a part of, or connected to, riparian habitat. Based on the specifics of this scenario, the two elderberry shrubs within the project area are not likely to be occupied..

Appendix C. VELB Mitigation Bank Standards

The following was prepared by Sacramento Fish and Wildlife Office conservation banking staff as part of an effort to standardize and make transparent the process for establishing Valley Elderberry Longhorn Beetle (VELB) conservation banks. The credit release schedule and performance standards are intended to be practical, while promoting the success of the plantings. This document is not a comprehensive review of VELB literature, and is subject to revision.

Credit Release Schedule

The credit release schedule and performance standards are designed to ensure that the VELB conservation bank plantings will be self-sustaining after the irrigation is turned-off (before the start of year 5), so the credit release schedule is longer than it would be without irrigation, and credits will not be released prior to the year indicated. Credits will be released per the following schedule, slightly modified from the May 2008 Statewide Banking Template:

Table 1. Credit release schedule.

Credit Release	Action	Credits to be Released
1	Bank Establishment	15%
2	Service Acceptance of As-builts*	25%
3	Meet Year 2 Performance Standards, and endowment funded 15%	15%
4	Meet Year 3 Performance Standards, and endowment funded 40%	15%
5	Meet Year 5 Performance Standards, and endowment funded 70%	15%
6	Meet Year 7 Performance Standards, and endowment funded 100%	15%

*Review to be accomplished within 60 days of receipt of complete as-built drawings.
Note: endowment can be funded on an accelerated schedule, if the bank sponsor so desires.

Performance Standards

Performance standards apply to the credit releases upon the third release. If the elderberry population is too large for direct census, then sampling methods may be used, and they must be thoroughly described in the proposed bank's development and management plans, and will be subject to Service approval. Sample size must be adequate to assess the health of the population, as determined by a qualified plant ecologist[1]. Qualifications should be submitted with proposal.

Performance standards are based on survival without re-planting, and on baseline conditions of health and vigor of the elderberry plantings. If performance standards are not met, then the bank sponsor will meet with the Service to determine a course of action.

Table 2. Performance Standards.

Credit Release #	Monitoring Year	Performance Standards
3	Year 2	• 60% survival of original planted elderberries without re-planting[2], and all survivors categorized as "normal"[3] to "exceptionally vigorous"[3] • 60% survival of associates without re-planting[2] • Irrigation ok
4	Year 3	• Maintain 60% survival of original planted elderberries without re-planting[2], and all survivors categorized as "normal"[3] to "exceptionally vigorous"[3] • Maintain 60% survival of associates without re-planting[2] • Irrigation ok
5	Year 5	• Maintain 60% survival of original planted elderberries without re-planting[2] • Maintain 60% survival of associates without re-planting[2] • No more than 10% decline in overall health of *Sambucus* from baseline conditions[4] • No irrigation[5] • Fertilizer application prohibited
6	Year 7	• Maintain 60% survival of original planted elderberries without re-planting[2] • Maintain 60% survival of associates without re-planting[2] • No more than 10% decline in overall health of *Sambucus* from baseline conditions[4] • No irrigation[5] • Fertilizer application prohibited

[1]Qualified plant ecologist is defined as a person who:

a) holds a bachelor's degree or higher in botany, plant ecology or related plant science, or demonstrates experience equivalent to such education, and

b) shows demonstrated expertise in ecological sampling/experimental design beyond obtaining an academic degree, and

c) has 2+ years experience in collecting and analyzing botanical field data beyond obtaining an academic degree

[2]If re-planting, then time-clock begins again, with no additional credit releases until performance standards for the monitoring year in which the re-planting occurred has been met. Re-planting must be approved by the Service in advance.

[3]See Vigor and Vitality, below.

[4]Years 2, 3 and 4 are used to establish the baseline condition. See Baseline Conditions, below.

[5]If irrigation continues beyond the end of monitoring year 4, credit release #'s 5 and 6 will be delayed beyond the years indicated in Table 2.

Vigor and Vitality

Observations made by a qualified plant ecologist during the late spring/early summer will be used to determine the vigor and vitality of surviving shrubs for the year 2 and 3 performance standards, and photographs should clearly document this. The following scale will be used (from Mueller-Dombois and Ellenberg, 1974):

- Very feeble, never flowering/fruiting
- Feeble
- Normal
- Exceptionally vigorous

Baseline Conditions

Observations made by a qualified plant ecologist during late spring/early summer will be used to determine the baseline conditions of the planted elderberries. Sampling is allowable where the population of planted elderberries is extensive, and must be thoroughly described in the bank's development and management plans. The following measurements will be used to determine baseline conditions (Elzinga, et. al., 1998):

- Height
- # of inflorescences per shrub
- # of stems per shrub
- # of stems over 1" diameter per shrub
- Volume of plant (height x cover)

These measurements will be averaged for surviving shrubs over years 2, 3 and 4. Condition of the planted elderberries in years 5 and 7 will be compared to the baseline. Photographs should clearly document the baseline condition.

Monitoring Reports

Monitoring reports will be required during the establishment period for years 2-7, and should clearly document the progress of the plantings. All surveys must be thoroughly described, and copies of any field notes or data sheets from the current year included. Photographic documentation of elderberry and associate condition during the field surveys is required, and should clearly show the condition of all shrubs sampled. If sampling, describe sampling design. Each report should be comprehensive, and include data summaries and other pertinent information from previous monitoring years.

Requirements for long-term monitoring and reporting, including due dates, should be discussed in the bank's development and management plans.

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Appendix F

Confidential Cultural Report -- Not Submitted

Appendix G

UFRR Hydraulic Impact Technical Memorandum

Mossdale Urban Flood Risk Reduction Project
Hydraulic Impact Analysis

Prepared for: San Joaquin Area Flood Control Agency (SJAFCA)

Date: October 13, 2025

Prepared by: Baron Creager, PE, CFM & Nick McGuire, PE

Reviewed by: Mike Rossiter, PE, CFM

INTRODUCTION

This technical memorandum (TM) was developed for the San Joaquin Area Flood Control Agency (SJAFCA) to support implementation of the Mossdale Tract Urban Flood Risk Reduction (UFRR) Project (Project). The purpose of the UFRR Project is to provide 200-year Urban Level of Protection (ULOP) to the Mossdale Tract Area in accordance with the requirements of Senate Bill (SB5). The Project includes fix-in-place levee improvements along the right bank of the lower San Joaquin River (LSJR) and a dryland levee extension south of Manteca, CA.

R&F Engineering, Inc. (R&F) conducted an analysis to assess potential hydraulic impacts associated with implementation of the Project, primarily focusing on the proposed dryland levee extension which is intended to prevent flanking floodwaters from entering the Mossdale Tract. This TM summarizes the methods and results of the hydraulic impact analysis.

BACKGROUND

The existing levees surrounding the Mossdale Tract are designed to provide protection against the 100-year flood event under current climate conditions. The “100-year flood event” refers to a flow event that has a 1-in-100 (or 1%) chance of occurring in any given year and serves as the standard level of protection used by the Federal Emergency Management Agency (FEMA) for levee accreditation.

As noted previously, California Senate Bill 5 (SB 5) requires a higher standard of protection—specifically, the 200-year (0.5% annual chance) flood event—for levees protecting urban and urbanizing areas within the Central Valley. In support of this requirement, the California Department of Water Resources (DWR) published the Urban Levee Design Criteria (ULDC) in 2012. The ULDC provides technical guidance for designing, evaluating, operating, and maintaining levees and floodwalls to meet 200-year protection standards, while also incorporating allowances for future climate change and associated hydrologic uncertainty.

The UFRR Project proposes to extend the existing dryland levee eastward and implement fix-in-place improvements along the right (east) bank of the Lower San Joaquin River (LSJR). These improvements are intended to enhance flood protection for the Mossdale Tract Area, to comply with ULOP requirements, and to provide resilience against future climate conditions.

Figure 1 presents the proposed UFRR Project elements, including the fix-in-place levee improvements and the dryland levee extension to Tinnin Road.

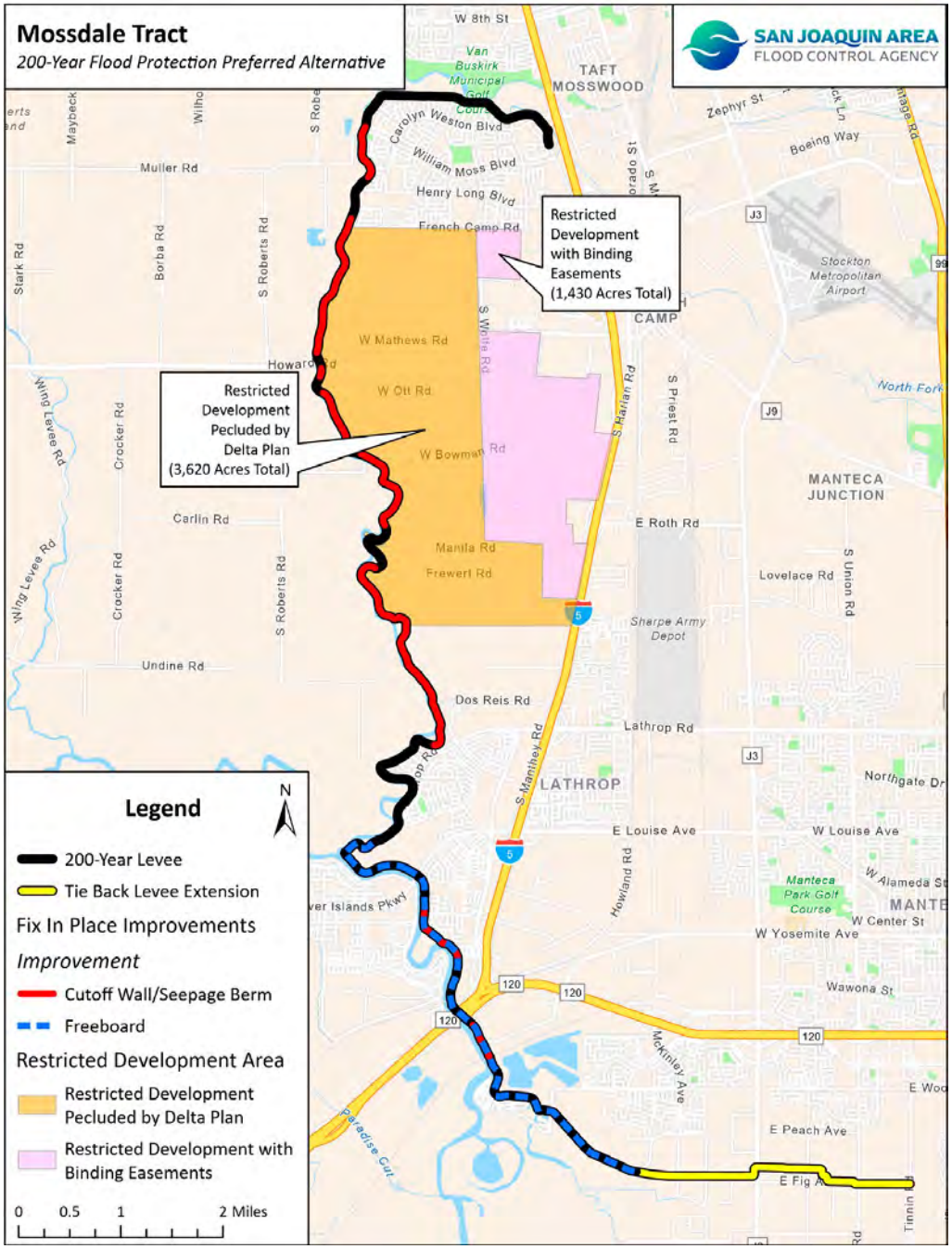


Figure 1. Proposed Mossdale UFRR Project Improvements

HYDRAULIC MODEL DEVELOPMENT

The model used to evaluate hydraulic impacts of the UFRR project is a HEC-RAS v6.3.1 model that has been incrementally updated through various studies since its initial development by DWR as part of the Central Valley Flood Evaluation and Delineation (CVFED) program. The 2014 RD 17 Hydraulics Study[1] updated the CVFED model to v4.1 and recalibrated it. The 2021 UFRR Study[2] updated it to v5.0.3 which incorporated 2D floodplains into the model. In 2023, R&F up-versioned the model to v6.3.1, incorporated new 2017 terrain data flown by the United States Geological Survey (USGS), and further refined the model geometry[3]. A more detailed discussion of these updates to the HEC-RAS model can be found in the referenced reports.

To assess potential hydraulic impacts from implementing the UFRR project the existing (2022) hydrology was simulated under with- and without-project conditions. To assess the project's resilience to climate change the with- and without-project conditions are simulated under additional climate change hydrology scenarios. These scenarios and the associated assumptions are discussed in more detail below.

WITHOUT PROJECT CONDITIONS

The without-project condition represents the Lower San Joaquin River (LSJR) system without implementation of the proposed UFRR Project. The hydraulic model for this scenario is based primarily on 2017 LiDAR terrain data, which reflects existing topographic conditions and levee configurations at that time. Most notably, the Mossdale dryland levee is represented in its pre-project state, terminating at Tinnin Road.

Since 2017, the River Islands community of Lathrop has completed construction of a new ring levee system that surrounds the community. River Islands is located south and east of Old River, north of Paradise Cut, and west of the LSJR near the Interstate 5 (I-5) bridge, forming an "island" bounded by these three waterways. To reflect these improvements, R&F Engineering incorporated terrain data for the newly constructed ring levee into the model using as-built drawings and digital elevation models provided by MBK Engineers.

In addition, the Phase 1 Lower San Joaquin River Project (LSJRP)—led by the U.S. Army Corps of Engineers (USACE) in partnership with SJAFCA—is currently in design and will include levee improvements in North and Central Stockton. Planned improvements consist of fix-in-place levee upgrades and a new levee segment along the right bank of Duck Creek east of I-5. As this project is not yet constructed, the Phase 1 LSJRP improvements were not included in the current (2022) conditions model scenarios but were incorporated into the future climate change scenarios to reflect long-term implementation assumptions.

[1] PBI. 200-Year Freeboard Analysis & Floodplain Mapping within RD 17. May, 2014
[2] PBI. Mossdale Tract Area Urban Flood Risk Reduction: Hydraulic Modeling Technical Memorandum. June, 2021
[3] R&F Engineering. Mossdale Tract Urban Flood Risk Reduction: Hydraulic Model & Climate Change Update. 20 March 2023.

Figure 2 provides an overview of the key levee features under the without-project condition, including the existing extent of the Mossdale dryland levee, the River Islands ring levee, and planned Phase 1 LSJRP improvements.

WITH-PROJECT CONDITIONS

The with-project scenarios include the fix-in-place levee improvements and the dryland levee extension out to Tinnin Road that are associated with the Mossdale UFRR Project, as previously shown in Figure 1.

All levees, in both the without-project and with-project conditions, were assumed to hold and were not set to breach in any of the scenarios. If water surface elevations (WSELs) reached the top of the levees, the levees were modeled to act as weirs and overtop without failing.

HYDROLOGY

Model hydrology was derived from the 2022 Central Valley Flood Protection Plan (CVFPP) and accompanying hydraulic models. The CVFPP provides 200-year event at-latitude flows on the SJR at Vernalis, CA (Index Point SJ28) under existing (2022) conditions, as well as future (2072) conditions. The CVFPP provides low, median, and high projections for future conditions and the median projection was chosen for analysis and planning purposes on the Project.

The 200-year flow event under 2022 hydrologic conditions was used as the hydrology for current conditions scenarios. To represent future climate change conditions, the 200-year event under the CVFPP's median 2072 climate change hydrologic conditions were evaluated. In addition, the UFFR Project's design hydrology, which lies between current hydrologic conditions and CVFPP 2072 hydrologic conditions, were also evaluated.

The 2022 CVFPP sets the target at-latitude flows at Vernalis for the 200-year event under 2022 and 2072 (median) hydrologic conditions to be 101,300 cfs, and 320,900 cfs, respectively. To achieve these target flows, historic flood events were scaled up (e.g. 115% of the 1997 event) to meet the target peak flows. The UFRR Design Hydrology represents a climate change event between current hydrologic conditions and CVFPP 2072 hydrologic conditions and is set at 202,925 cfs. Further discussion of the UFRR Design Hydrology can be found in the Mossdale UFRR HBOD report[4]. At-latitude peak flows at Vernalis for the analyzed flow events are presented in Table 1 below.

Table 1. Flow Scenarios used for hydraulic impact analysis.

Flow Scenario	2022 CVFPP Vernalis At-Latitude Flow	1997 Scaled Event	Modeled Vernalis At-Latitude Flow
200-Year Current (2022) Condition	101,300 cfs	115%	104,520 cfs
200-Year UFRR Design Condition	202,925 cfs	160%	209,990 cfs
200-Year Future (2072) Condition	320,900 cfs	200%	315,047 cfs

[4] San Joaquin Area Flood Control Agency. Mossdale Tract Area Urban Flood Risk Reduction Project: Hydraulic Basis of Design Report. 17 February 2023.



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Without-Project Conditions for Hydraulic Impact Analysis

Figure 2

Date: 5/6/2025

Path: C:\Users\NickMcGuire\R&F Engineering, Inc\R&F Engineering - Documents\4.0 GIS\Project\SJAFCA\UFRR\MXD\Dryland Levee Hydraulic Impact Analysis\Hydraulic Impact Analysis.aprx

DOWNSTREAM BOUNDARY CONDITIONS

Downstream boundary conditions for the model were defined using variable stage hydrographs developed from historical Delta stage data. These hydrographs were scaled to align with peak water surface elevations (WSELs) currently being used for the design of the USACE Phase 1 LSJRP[5]. The 200-year Current (2022) Condition scenario followed a historical stage-frequency analysis at the locations of the model's downstream boundary conditions (Old River, Middle River, and the SJR). The 200-year UFRR Design and Future (2072) climate change conditions incorporate sea level rise of 0.66-feet and 1.66-feet respectively, consistent with what is being used for the Phase 1 LSJRP. The sea level rise estimate is based on the USACE Adopted Curve II published in EC 1165-2-212[6] which shows the sea level rise projections falling between the intermediate and high curves estimated by USACE. A breakdown of the peak water surface elevations for each of the downstream boundary conditions are shown in Table 2.

Table 2. Downstream Boundary Conditions (ft-NAVD88) used for hydraulic impact analysis.

Flow Scenario	Burns Cutoff	Grant Line Canal	Middle River	Old River	San Joaquin River
200-Year Current (2022) Conditions	11.34	12.69	11.85	12.69	11.34
200-Year UFRR Design Scenario	12.00	13.35	12.51	13.35	12.00
200-Year Future (2072) Conditions	13.00	14.35	13.51	14.35	13.00

MODEL SCENARIOS

To assess potential hydraulic impacts from implementing the UFRR project the existing (2022) hydrology was simulated under with- and without-project conditions. To assess the project's resilience to climate change the with- and without-project conditions are simulated under additional climate change hydrology scenarios. All scenarios were analyzed based on the assumptions and parameters detailed above. Table 3 below presents an overview of the four model scenarios and the associated conditions of each scenario.

[5] USACE. Design Criteria and Assumptions for DWSPs and MTOLs. 3 April 2023.
[6] USACE. Sea-Level Change Considerations for Civil Works Programs. 1 October 2011.

Table 3. Overview of model scenarios used in hydraulic impact analysis.

UFRR Project Scenario	Index Year	Flow at Vernalis (cfs)	Sea Level Rise (feet)	UFRR Project (Fix-in-Place + Dryland Extension)	LSJRP – Phase 1	River Islands Levee
Without Project	**Current (2022) Conditions**	104,502	0.0	No	No	Yes
With Project				Yes	No	Yes
Without Project	**UFRR Design Conditions**	209,990	0.66	No	Yes	Yes
With Project				Yes	Yes	Yes
Without Project	**Future (2072) Conditions**	315,047	1.66	No	Yes	Yes
With Project				Yes	Yes	Yes

RESULTS

The following section presents the results of the with- and without-project existing (2022) conditions scenarios developed to evaluate the potential hydraulic impacts of the proposed UFRR Project. A high-level evaluation of the project's resiliency to climate change is also provided.

CURRENT (2022) CONDITIONS

WITHOUT PROJECT

Figure 3 shows the modeled floodplain under the 200-year Current (2022) Condition event without implementation of the UFRR Project. Under this scenario, the existing dryland levee remains intact but is flanked along its eastern end. Floodwaters flank around the levee system, with up to 3,300 cfs of overland flow entering the Mossdale Tract from the south.

The result is extensive flooding within 3,650 acres of the Mossdale Tract. Approximately 20,000 acre-feet of floodwater inundates residential and industrial areas north of the dryland levee. The Oakwood Shores neighborhood and adjacent areas are among the most severely impacted, with flood depths exceeding 10 feet. Flooding depths generally decrease moving eastward across the floodplain, ranging from 2 to 5 feet in depth, while areas east of Airport Way experience more localized street-level flooding. Commercial and industrial parcels north of Highway 120 are inundated to depths between 0 and 5 feet.

Additional overland flooding occurs outside the Mossdale Tract area, particularly west of the San Joaquin River (SJR). Flooding is observed near River Islands (south of I-5), north of Tracy and

Mountain House, in southern Roberts Island, and throughout portions of Stockton and French Camp. Many of the non-urban levees along the lower San Joaquin River system are geotechnically fragile and become unstable in as little as a 10-year flow event. Under a real-world 200-year flood, these levees would likely fail before being overtopped, further exacerbating regional flood risks.

WITH-PROJECT

Figure 4 illustrates the modeled floodplain for the same 200-year event, but with the Mossdale UFRR Project in place. With the proposed levee improvements, including the dryland levee extension, flanking at the eastern edge of the Mossdale Tract is prevented. As a result, flooding is completely eliminated within the Mossdale Tract under the 200-year event.

Localized flooding persists near French Camp and parts of Stockton, but these areas are also inundated under the without-project condition and are not considered to be impacted by project-induced changes. Minor increases in flood extent are observed west of the SJR, which are further discussed in the following comparison section.

COMPARISON OF WITH- AND WITHOUT PROJECT CONDITIONS

Figures 5 and 6 show the *changes* in flood extent and flood depth, respectively, resulting from implementation of the Mossdale UFRR Project. Overall, approximately 3,650 acres are removed from the 200-year floodplain under 2022 conditions. This benefit is concentrated north of the extended dryland levee, where floodwaters are redirected away from the Mossdale Tract and back into the San Joaquin River system.

This redirection of flow slightly raises in-channel WSELs—by approximately 0.1 feet in Old River and 0.2 feet in the San Joaquin River. These increases are relatively small, but with many levees already being overtopped under the without-project scenario and with the surrounding topography being relatively flat, the increased WSELs lead to some additional shallow overland flooding, primarily west of the SJR. Approximately 2,970 acres of previously dry land experience new inundation, most of which is agricultural.

Flood depths in these newly flooded areas remain shallow—generally less than 3 feet. The most notable increase in depth occurs in an existing low-lying pond west of the SJR, between I-5 and the Union Pacific Railroad, where modeled depths reach approximately 6 feet. However, this location is undeveloped and already subject to ponding under current conditions.

Table 4 summarizes changes in flooded acreage by depth category. Under with-project conditions, there is a slight increase in areas experiencing shallow flooding (less than 3 feet), a minor reduction in moderate flooding (3 to 5 feet), and a notable reduction in deep flooding (greater than 5 feet). The net effect is a reduction in total inundated area of approximately 680 acres.

Table 4. Area flooded in 2022 WOP and 2022 WP scenarios categorized by depth.

Flooding Depth (ft)	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 -1	1 - 3	3 - 5	>5	TOTAL
WOP (acres)	830	1,230	990	820	4,080	2,590	10,250	**20,790**
WP (acres)	850	1,410	1,280	1,060	4,910	2,180	8,420	**20,110**
Difference (acres)	20	180	290	240	830	-410	-1,830	**-680**

Table 5 confirms that the UFRR Project does not cause any new flooding under more frequent, lower-magnitude events. The 2-, 5-, 10-, 50-, and 100-year events remain unaffected, as the existing Mossdale levees already provide adequate protection for these flood scenarios.

Table 5. Newly flooded area and flooded area removed in Current (2022) Condition scenario due to UFRR Project implementation.

Return Period Event	2-year	5-year	10-year	50-year	100-year	200-year
Newly Flooded Area (acres)	No Change	No Change	No Change	No Change	No Change	2,970
Flooded Area Removed (acres)	No Change	No Change	No Change	No Change	No Change	-3,650

CONCLUSIONS OF CURRENT (2022) CONDITIONS SCENARIOS

Under current (2022) conditions, the Mossdale UFRR Project is effective in eliminating 200-year flood risk within the Mossdale Tract and prevents flanking of the dryland levee. This results in significant flood risk reduction for the homes, businesses, and critical infrastructure in the area. While redirected floodwaters lead to minor increases in river stages and shallow flooding in adjacent areas—primarily south of the dryland levee and west of the San Joaquin River—these impacts are limited in both depth and extent and do not impact urbanized areas. No new flooding occurs under smaller, more frequent (100-year or less) flood events.

Impacts to agricultural areas under with-project conditions primarily consist of slightly deeper flood depths and potentially longer flood durations. The hydraulic modeling conducted for this analysis does not account for infiltration losses or percolation of floodwaters into the ground. Instead, it assumes that all floodwaters remain ponded in place. In reality, the predominant soil type in the affected area is Hydrologic Soil Group C, which has an average infiltration rate of approximately 0.1 inches per hour[7]. At this rate, one foot of standing water would take about five days to infiltrate into the soil. In addition, depending on ambient air temperatures, some reduction in ponded depth would also occur due to evaporation. Because the flooded areas are

[7] USACE. HEC-RAS 2D User's Manual – Infiltration Methods. 2025

generally flat, both percolation and evaporation would help to shorten the overall duration of shallow flooding impacts in these agricultural areas.

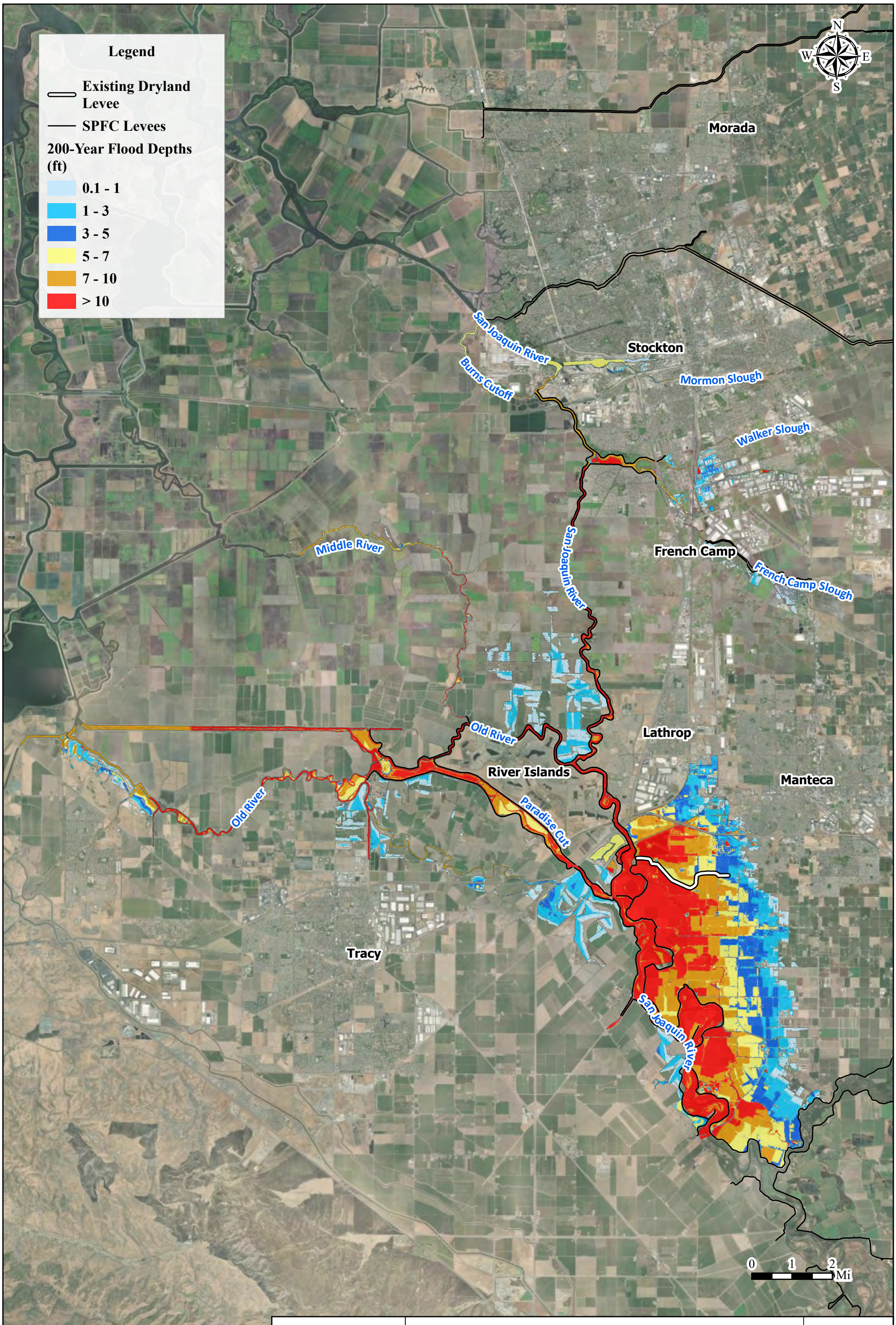
Overall, the analysis demonstrates that the Project substantially reduces flood risk within the protected area, with only minor and manageable changes elsewhere in the system.

CLIMATE CHANGE RESILIENCY

The UFRR Design conditions and Future (2072) conditions were evaluated to determine the project's sensitivity and resiliency to climate change. Both conditions convey significantly more water through the San Joaquin River system, and both are subject to higher sea levels due to climate change.

The without-project scenarios inundate the entirety of Mossdale Tract and affected parts of downtown Stockton when floodwaters re-entered French Camp Slough, raising local water surface elevations. The interior of River Islands remains dry, but levees along Old River, Middle River, and San Joaquin River are overtopped, and thousands of acres of farmland are inundated. The northern extents of Tracy are affected by flooding, but the affected parcels are predominantly industrial and commercial, not residential.

The with-project scenarios remove Mossdale Tract from the 200-year floodplain and redirect floodwaters back in the San Joaquin River at the dryland levee. Since water does not travel overland to French Camp Slough, water levels do not rise high enough to inundate downtown Stockton to the same degree as the without-project scenario. Some residual flooding from Mormon Slough and Walker Slough is still observed. The water redirected from Mossdale Tract minorly increases flood extents and flood depths in the rest of the project area, but over 10,000 net acres are removed from the floodplains with implementation of the proposed project, and Mossdale Tract is protected. Therefore, the project is resilient against potential future climate change and would further protect the project area should such an extreme event occur.



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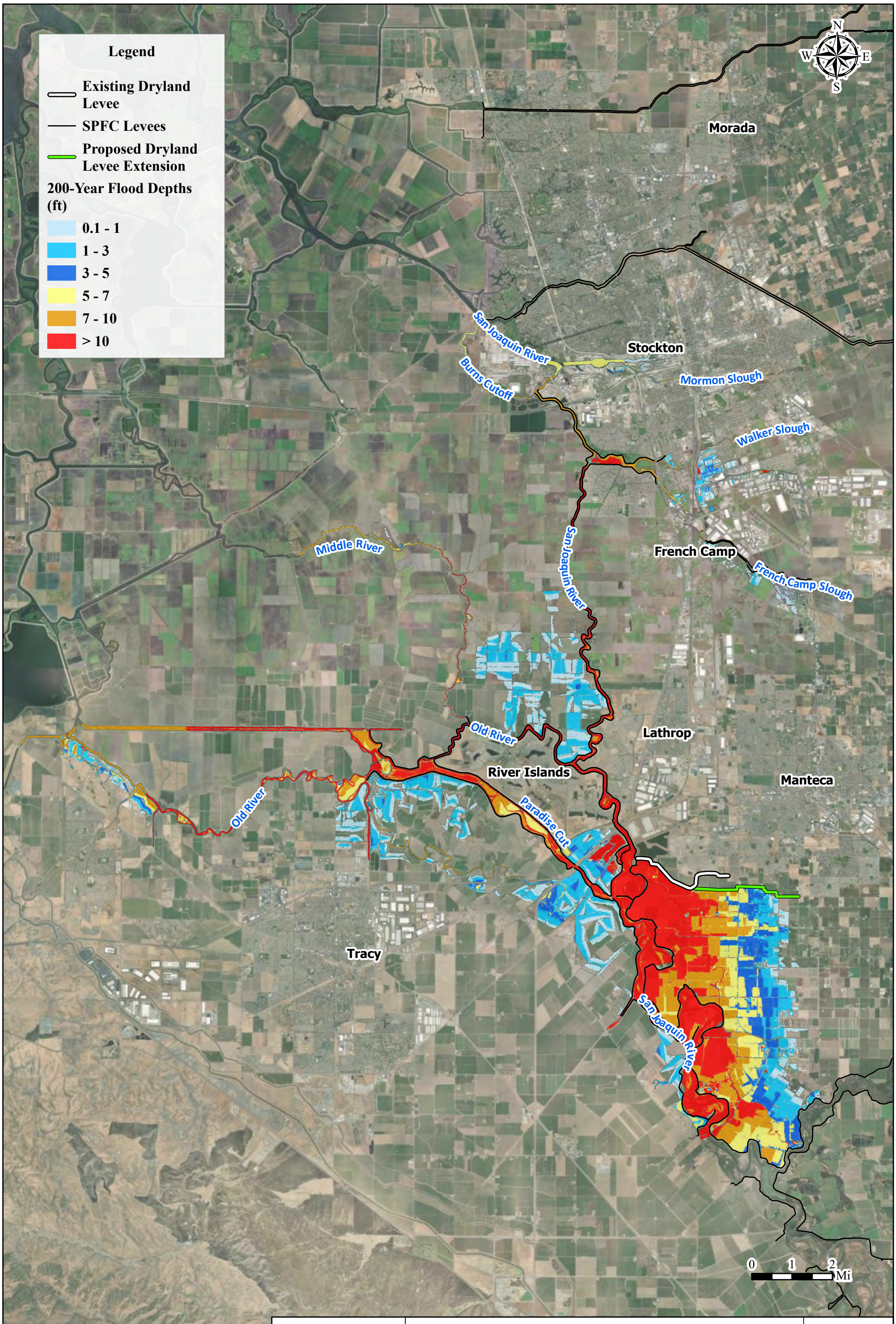
San Joaquin Flood Control Agency

200-Year 2022 Event Without Project Conditions

Figure 3

Date: 9/25/2025

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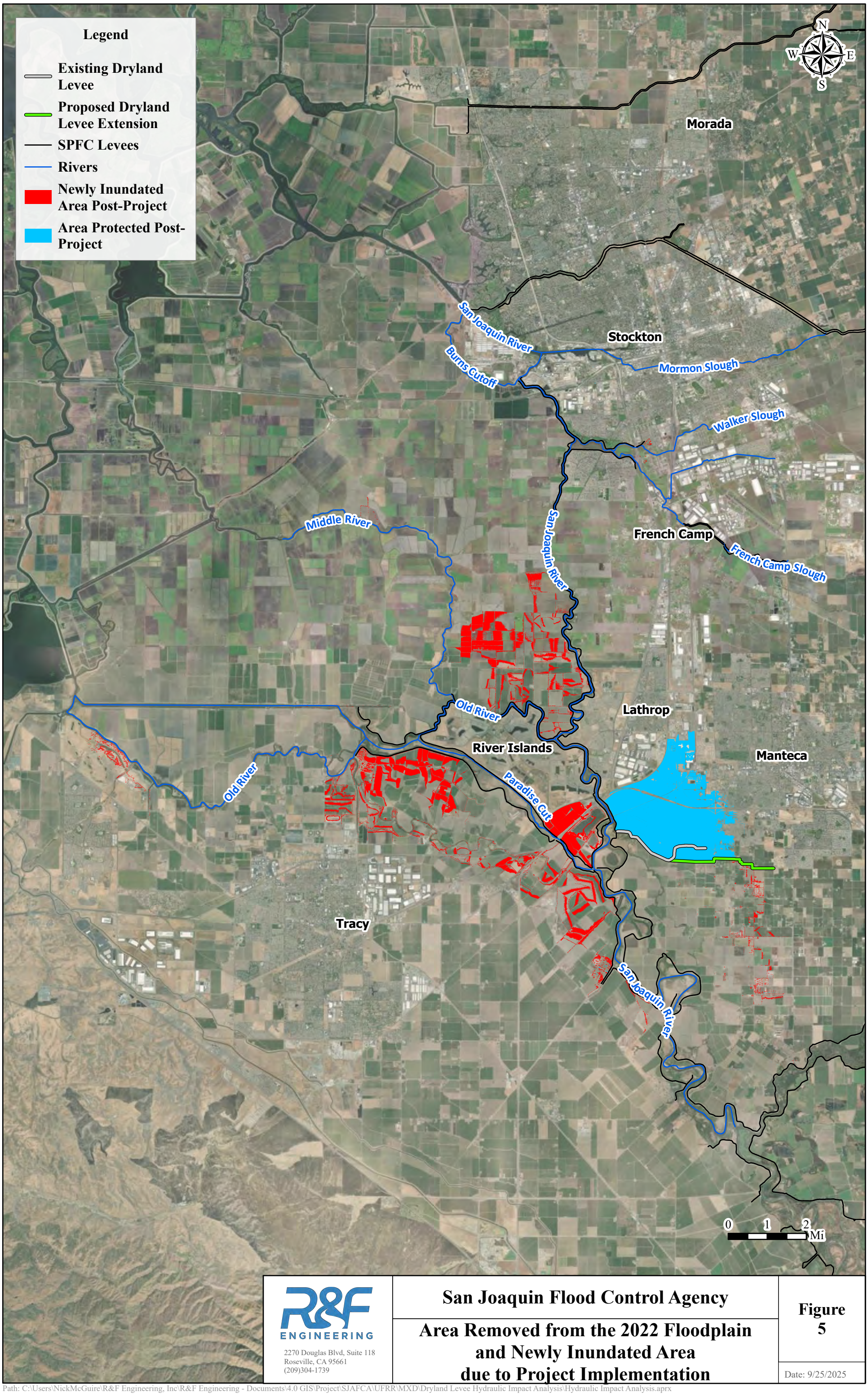
San Joaquin Flood Control Agency

200-Year 2022 Event With Project Conditions

Figure 4

Date: 9/25/2025

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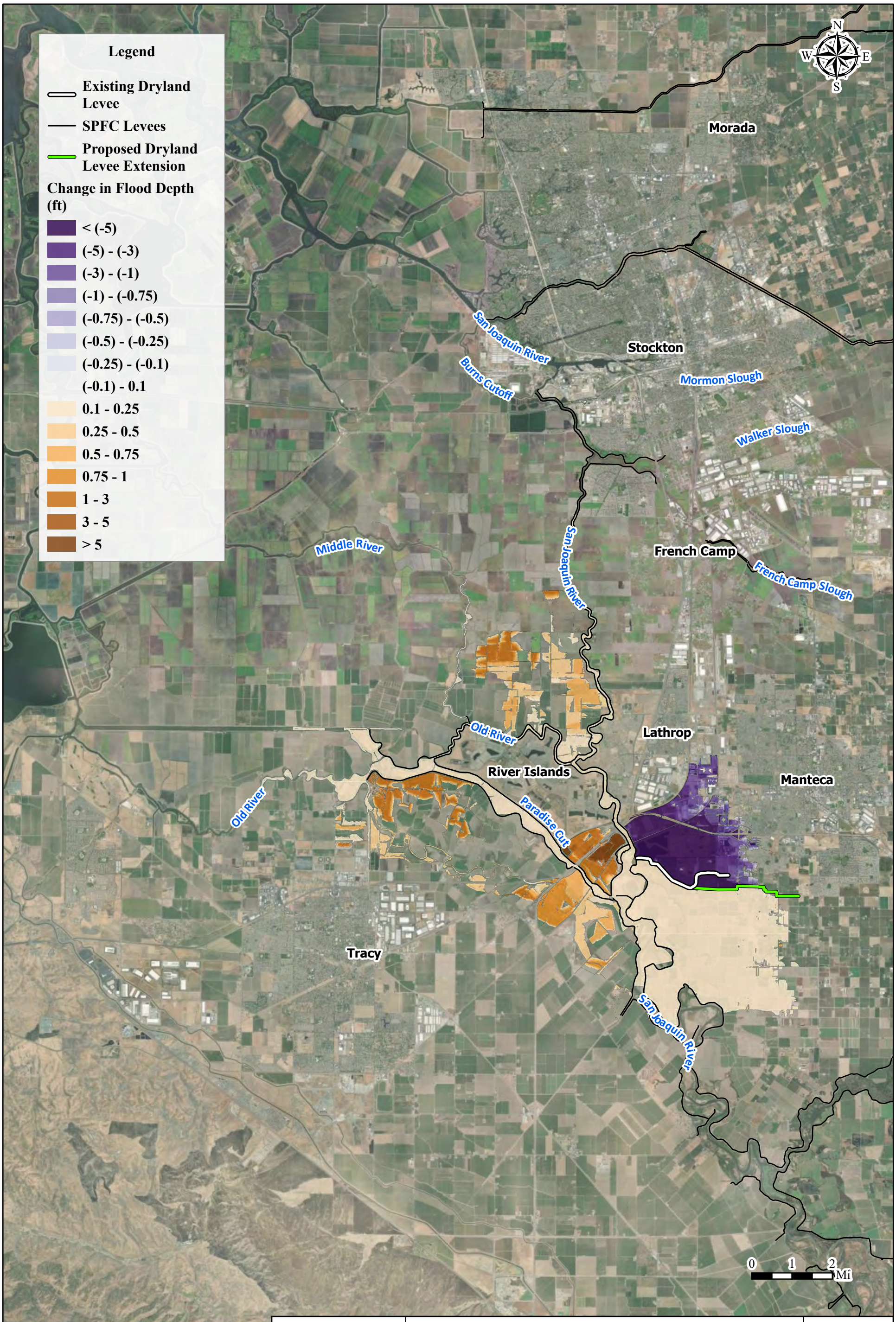
San Joaquin Flood Control Agency

Area Removed from the 2022 Floodplain and Newly Inundated Area due to Project Implementation

Figure 5

Date: 9/25/2025

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Flood Depth Changes of 200-Year 2022 Event With Project vs. Without Project Conditions

Figure 6

Date: 5/6/2025

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Summary

This memorandum summarizes the results of a hydraulic impact analysis conducted to evaluate the effects of implementing the Mossdale Tract Urban Flood Risk Reduction (UFRR) Project. The purpose of the analysis is to assess how the proposed levee improvements—primarily the dryland levee extension—affect regional flood behavior under the current (2022) 200-year flood conditions, while considering resiliency to potential future climate change conditions.

Under current (2022) conditions, the Mossdale UFRR Project is shown to eliminate 200-year flooding within the Mossdale Tract by preventing flanking of the existing dryland levee. This provides meaningful flood risk reduction to homes, businesses, and infrastructure in the area. While the Project redirects some floodwaters back into the San Joaquin River system, the resulting increases in flood extent are limited to shallow overland flooding in primarily agricultural areas west of the river and south of the dryland levee. These impacts are minor in both depth and extent and do not affect urbanized areas. The analysis also confirms that the Project does not cause any new flooding under more frequent events, including those at or below the 100-year level. The project is also shown to provide protection to the project area under potential future climate change conditions.

MODELING ASSUMPTIONS AND LIMITATIONS

As with all hydraulic modeling, this analysis includes several simplifying assumptions and limitations that may affect how an extreme flood event would unfold in reality. Results from this analysis should be interpreted with these limitations in mind.

The model was run over a 27-day simulation window, which is sufficient to capture peak inundation depths and extents but does not simulate full drainage or drying of floodwaters. In an actual flood event, emergency response actions—such as relief cuts, pumping, or temporary flood barriers—could influence flood behavior and recession rates. Additionally, natural processes like evaporation and infiltration would begin to reduce ponded water volumes following peak inundation.

The complex network of tributaries and confluences within the Lower San Joaquin River system makes the model extremely susceptible to instability. Each river reach typically requires some flow to keep the computations stable. There are some waterways in the model (e.g. Mormon Slough and Walker Slough) that have minimum flows running through them that are not based on any flow event, but only present to maintain model stability. Some overtopping in downtown Stockton is observed from these channels that is unlikely to be observed in reality, but it exists in the modeling environment to ensure stability and solution convergence.

This analysis assumes that all levees remain intact throughout the simulated flood event, with no structural failures occurring. Overtopping is allowed in the model, but breach behavior—such as levee erosion or collapse—is not simulated. In reality, many non-urban levees in the

lower San Joaquin River region are uncertified and may be vulnerable to failure during large events. If such breaches were to occur, the extent and depth of flooding could differ significantly from the modeled results. The same applies to upstream levees in the San Joaquin River watershed, where failure could alter the volume and timing of flows reaching Vernalis and, ultimately, the project area.

Appendix H

Noise Monitoring Measurements and Results

Summary

File Name on Meter	LxT_Data.145.s
File Name on PC	LxT_0004435-20221101 122617-LxT_Data.145.ldbir
Serial Number	0004435
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	ST-1: Galley Way, adjacent to San Joaquin River
Job Description	
Note	

Measurement

Description		
Start	2022-11-01	12:26:17
Stop	2022-11-01	12:41:18
Duration		00:15:01.8
Run Time		00:15:01.8
Pause		00:00:00.0
Pre-Calibration	2022-10-25	12:08:28
Post-Calibration		None
Calibration Deviation		---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT2B
Microphone Correction	Off
Integration Method	Exponential
Overload	144.1 dB

	A	C	Z
Under Range Peak	100.3	97.3	**102.3** dB
Under Range Limit	**38.6**	38.2	45.0 dB
Noise Floor	29.5	29.1	35.9 dB

	First	Second	Third
Instrument Identification			

Results

LASeq	46.4	
LASE	76.0	
EAS	4.401	µPa²h
EAS8	140.565	µPa²h
EAS40	702.824	µPa²h
LZpeak (max)	2022-11-01 12:41:03	113.2 dB
LASmax	2022-11-01 12:39:33	58.3 dB
LASmin	2022-11-01 12:36:15	32.3 dB
SEA	-99.9	dB

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LZpeak > 135.0 dB	0	0.0 s
LZpeak > 137.0 dB	0	0.0 s
LZpeak > 140.0 dB	0	0.0 s

LCSeq	67.9	dB
LASeq	46.4	dB
LCSeq - LASeq	21.5	dB
LAleq	48.0	dB
LAeq	46.4	dB
LAleq - LAeq	1.5	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	46.4					
LS(max)	58.3	2022/11/01 12:39:33				
LS(min)	32.3	2022/11/01 12:36:15				
LPeak(max)					113.2	2022/11/01 12:41:03

Overload Count	0	
Overload Duration	0.0	s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	0.01	0.01 %
Projected Dose	0.18	0.18 %
TWA (Projected)	44.5	44.5 dB
TWA (t)	19.5	19.5 dB
Lep (t)	31.4	31.4 dB

Statistics

LAS 5.00	53.3	dB
LAS 10.00	51.5	dB
LAS 33.30	41.5	dB
LAS 50.00	40.6	dB
LAS 66.60	40.0	dB
LAS 90.00	34.8	dB

Record #	Record Type	Date	Time	LASeq	LASmax	LASmin	OVLD	Marker	Comments
1	Run	2022-11-01	12:26:17						
2		2022-11-01	12:26:17	37.3	45.1	33.2	No		
3		2022-11-01	12:27:17	35.6	38.7	34.0	No		
4		2022-11-01	12:28:17	41.3	50.7	33.8	No		
5		2022-11-01	12:29:17	44.3	52.2	39.7	No		
6		2022-11-01	12:30:17	40.6	41.7	39.8	No		
7		2022-11-01	12:31:17	40.8	43.8	39.4	No		
8		2022-11-01	12:32:17	40.5	42.2	39.3	No		
9		2022-11-01	12:33:17	41.4	45.7	39.3	No		
10		2022-11-01	12:34:17	40.6	43.3	39.4	No		
11		2022-11-01	12:35:17	45.7	54.4	32.3	No		
12		2022-11-01	12:36:17	39.4	51.6	32.6	No		
13		2022-11-01	12:37:17	41.2	49.4	33.9	No		
14		2022-11-01	12:38:17	49.8	55.1	40.3	No		
15		2022-11-01	12:39:17	53.6	58.3	48.7	No		
16		2022-11-01	12:40:17	52.0	55.4	47.3	No		
17		2022-11-01	12:41:17	53.3	53.9	52.4	No		
18	Stop	2022-11-01	12:41:18						

Summary

File Name on Meter	LxT_Data.146.s
File Name on PC	LxT_0004435-20221101 143049-LxT_Data.146.ldbir
Serial Number	0004435
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	ST-2: Frewhert Road, at gated entrance to private community
Job Description	
Note	

Measurement

Description	
Start	2022-11-01 14:30:49
Stop	2022-11-01 14:45:51
Duration	00:15:02.0
Run Time	00:15:02.0
Pause	00:00:00.0
Pre-Calibration	2022-10-25 12:08:28
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT2B
Microphone Correction	Off
Integration Method	Exponential
Overload	144.1 dB

	A	C	Z
Under Range Peak	100.3	97.3	**102.3** dB
Under Range Limit	**38.6**	38.2	45.0 dB
Noise Floor	29.5	29.1	35.9 dB

	First	Second	Third
Instrument Identification			

Results

LASeq	45.3	
LASE	74.8	
EAS	3.358 µPa²h	
EAS8	107.229 µPa²h	
EAS40	536.145 µPa²h	
LZpeak (max)	2022-11-01 14:45:40	105.0 dB
LASmax	2022-11-01 14:40:42	60.0 dB
LASmin	2022-11-01 14:39:21	37.4 dB
SEA	-99.9 dB	

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LZpeak > 135.0 dB	0	0.0 s
LZpeak > 137.0 dB	0	0.0 s
LZpeak > 140.0 dB	0	0.0 s

LCSeq	61.3 dB
LASeq	45.3 dB
LCSeq - LASeq	16.1 dB
LAleq	47.2 dB
LAeq	45.3 dB
LAleq - LAeq	1.9 dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	45.3					
LS(max)	60.0	2022/11/01 14:40:42				
LS(min)	37.4	2022/11/01 14:39:21				
LPeak(max)					105.0	2022/11/01 14:45:40

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	0.01	0.01 %
Projected Dose	0.16	0.16 %
TWA (Projected)	43.7	43.7 dB
TWA (t)	18.7	18.7 dB
Lep (t)	30.2	30.2 dB

Statistics

LAS 5.00	50.9 dB
LAS 10.00	46.9 dB
LAS 33.30	42.4 dB
LAS 50.00	41.4 dB
LAS 66.60	40.4 dB
LAS 90.00	38.9 dB

Record #	Record Type	Date	Time	LASeq	LASmax	LASmin	OVLD	Marker	Comments
1	Run	2022-11-01	14:30:49						
2		2022-11-01	14:30:49	42.4	48.4	38.5	No		
3		2022-11-01	14:31:49	40.4	43.4	38.0	No		
4		2022-11-01	14:32:49	41.5	43.1	39.0	No		
5		2022-11-01	14:33:49	41.8	43.7	39.4	No		
6		2022-11-01	14:34:49	40.0	42.0	38.7	No		
7		2022-11-01	14:35:49	41.1	43.6	39.0	No		
8		2022-11-01	14:36:49	39.6	43.4	37.9	No		
9		2022-11-01	14:37:49	38.9	41.4	37.4	No		
10		2022-11-01	14:38:49	40.0	45.7	37.4	No		
11		2022-11-01	14:39:49	50.4	60.0	39.0	No		
12		2022-11-01	14:40:49	51.1	58.7	39.4	No		
13		2022-11-01	14:41:49	43.3	52.4	39.8	No		
14		2022-11-01	14:42:49	43.3	46.9	40.6	No		
15		2022-11-01	14:43:49	44.7	50.1	41.0	No		
16		2022-11-01	14:44:49	49.2	53.5	42.0	No		
17		2022-11-01	14:45:49	51.3	52.0	50.9	No		
18	Stop	2022-11-01	14:45:51						

Summary

File Name on Meter	831_Data.071.s
File Name on PC	831_0002783-20221025 124908-831_Data.071.ldbin
Serial Number	0002783
Model	Model 831
Firmware Version	2.403
User	
Location	ST-3: William S Moss Park across the street on Inland Passage Way
Job Description	
Note	

Measurement

Description	
Start	2022-10-25 12:49:08
Stop	2022-10-25 13:05:15
Duration	00:16:07.8
Run Time	00:16:07.8
Pause	00:00:00.0
Pre-Calibration	2022-10-25 12:45:26
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	144.7 dB

	A	C	Z	
Under Range Peak	77.2	74.2	**79.2**	dB
Under Range Limit	**26.7**	27.2	33.2	dB
Noise Floor	17.6	18.1	23.6	dB

	First	Second	Third
Instrument Identification			

Results

LAeq	56.8		
LAE	86.7		
EA	51.754	µPa²h	
LZpeak (max)	2022-10-25 12:51:36	105.2	dB
LASmax	2022-10-25 12:49:41	77.7	dB
LASmin	2022-10-25 12:49:58	41.4	dB
SEA	-99.9	dB	

	Exceedance Counts	Duration	
LAS > 65.0 dB	7	32.4	s
LAS > 85.0 dB	0	0.0	s
LZpeak > 135.0 dB	0	0.0	s
LZpeak > 137.0 dB	0	0.0	s
LZpeak > 140.0 dB	0	0.0	s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**	
	56.8	56.8	-99.9	56.8	56.8	-99.9	-99.9	dB

LCeq	64.8	dB
LAeq	56.8	dB
LCeq - LAeq	8.0	dB
LAleq	59.5	dB
LAeq	56.8	dB
LAleq - LAeq	2.7	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	56.8		64.8		79.5	
LS(max)	77.7	2022/10/25 12:49:41	79.5	2022/10/25 12:49:41	94.5	2022/10/25 12:51:10
LF(max)	80.9	2022/10/25 12:49:40	83.6	2022/10/25 12:51:36	100.5	2022/10/25 12:51:36
LI(max)	81.7	2022/10/25 12:49:40	88.3	2022/10/25 12:51:36	103.2	2022/10/25 12:51:36
LS(min)	41.4	2022/10/25 12:49:58	54.5	2022/10/25 12:56:53	62.6	2022/10/25 13:01:10
LF(min)	39.8	2022/10/25 13:00:21	52.1	2022/10/25 12:56:51	59.8	2022/10/25 12:57:28
LI(min)	40.8	2022/10/25 12:49:58	55.3	2022/10/25 12:56:52	64.3	2022/10/25 13:01:10
LPeak(max)	93.5	2022/10/25 12:49:40	95.5	2022/10/25 12:49:40	105.2	2022/10/25 12:51:36

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	0	
OBA Overload Duration	0.0	s

Statistics

LA 5.00	59.4	dB
LA 10.00	56.2	dB
LA 33.30	47.7	dB
LA 50.00	45.8	dB
LA 66.60	44.8	dB
LA 90.00	43.4	dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD	Marker	Comments
1	Calibration Change	2022-10-25	12:45:26						
2	Run	2022-10-25	12:49:08						
3		2022-10-25	12:49:08	63.5	77.7	41.4	No		
4		2022-10-25	12:50:08	58.2	71.2	42.2	No		
5		2022-10-25	12:51:08	44.6	47.9	42.0	No		
6		2022-10-25	12:52:08	61.0	74.1	42.8	No		
7		2022-10-25	12:53:08	49.3	55.0	42.7	No		
8		2022-10-25	12:54:08	56.5	60.3	45.7	No		
9		2022-10-25	12:55:08	51.7	59.6	45.3	No		
10		2022-10-25	12:56:08	44.7	48.3	41.5	No		
11		2022-10-25	12:57:08	47.1	57.2	42.3	No		
12		2022-10-25	12:58:08	55.5	66.4	43.2	No		
13		2022-10-25	12:59:08	46.2	48.8	43.2	No		
14		2022-10-25	13:00:08	55.5	66.5	41.8	No		
15		2022-10-25	13:01:08	47.6	56.9	42.9	No		
16		2022-10-25	13:02:08	47.6	55.0	42.8	No		
17		2022-10-25	13:03:08	56.3	68.5	43.2	No		
18		2022-10-25	13:04:08	61.8	75.6	44.1	No		
19		2022-10-25	13:05:08	45.4	47.2	43.5	No		
20	Stop	2022-10-25	13:05:15						

Summary

File Name on Meter	831_Data.072.s
File Name on PC	831_0002783-20221025 133522-831_Data.072.ldbin
Serial Number	0002783
Model	Model 831
Firmware Version	2.403
User	
Location	ST-4: Woodward Avenue, approximately 400 feet north of W Aplicella Ct
Job Description	
Note	

Measurement

Description	
Start	2022-10-25 13:35:22
Stop	2022-10-25 13:50:54
Duration	00:15:32.5
Run Time	00:15:32.5
Pause	00:00:00.0
Pre-Calibration	2022-10-25 12:45:24
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	144.7 dB

	A	C	Z	
Under Range Peak	77.2	74.2	**79.2**	dB
Under Range Limit	**26.7**	27.2	33.2	dB
Noise Floor	17.6	18.1	23.6	dB

	First	Second	Third
Instrument Identification			

Results

LAeq	60.7	
LAE	90.3	
EA	120.396	µPa²h
LZpeak (max)	2022-10-25 13:44:01	99.9 dB
LASmax	2022-10-25 13:38:28	76.9 dB
LASmin	2022-10-25 13:39:07	47.2 dB
SEA	-99.9	dB

	Exceedance Counts	Duration
LAS > 65.0 dB	18	106.2 s
LAS > 85.0 dB	0	0.0 s
LZpeak > 135.0 dB	0	0.0 s
LZpeak > 137.0 dB	0	0.0 s
LZpeak > 140.0 dB	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**	
	60.7	60.7	-99.9	60.7	60.7	-99.9	-99.9	dB

LCeq	69.2	dB
LAeq	60.7	dB
LCeq - LAeq	8.5	dB
LAleq	63.0	dB
LAeq	60.7	dB
LAleq - LAeq	2.4	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	60.7		69.2		78.4	
LS(max)	76.9	2022/10/25 13:38:28	83.9	2022/10/25 13:38:28	89.7	2022/10/25 13:44:02
LF(max)	79.6	2022/10/25 13:38:28	86.3	2022/10/25 13:38:28	95.9	2022/10/25 13:41:58
LI(max)	80.4	2022/10/25 13:38:28	87.5	2022/10/25 13:38:28	98.2	2022/10/25 13:41:58
LS(min)	47.2	2022/10/25 13:39:07	58.1	2022/10/25 13:38:55	63.1	2022/10/25 13:39:06
LF(min)	46.6	2022/10/25 13:39:00	56.0	2022/10/25 13:39:00	60.3	2022/10/25 13:37:48
LI(min)	47.0	2022/10/25 13:39:06	59.0	2022/10/25 13:38:55	64.8	2022/10/25 13:39:06
LPeak(max)	90.9	2022/10/25 13:38:27	97.0	2022/10/25 13:38:27	99.9	2022/10/25 13:44:01

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	0	
OBA Overload Duration	0.0	s

Statistics

LA 5.00	67.4	dB
LA 10.00	64.4	dB
LA 33.30	56.5	dB
LA 50.00	54.4	dB
LA 66.60	52.0	dB
LA 90.00	49.2	dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD	Marker	Comments
1	Run	2022-10-25	13:35:21						
2		2022-10-25	13:35:22	61.8	72.9	53.6	No		
3		2022-10-25	13:36:22	56.8	69.5	48.2	No		
4		2022-10-25	13:37:22	49.6	52.8	48.2	No		
5		2022-10-25	13:38:22	62.9	76.9	47.2	No		
6		2022-10-25	13:39:22	64.9	75.5	48.0	No		
7		2022-10-25	13:40:22	57.9	68.9	51.5	No		
8		2022-10-25	13:41:22	60.8	70.4	54.0	No		
9		2022-10-25	13:42:22	55.9	66.8	49.0	No		
10		2022-10-25	13:43:22	63.3	72.9	51.1	No		
11		2022-10-25	13:44:22	57.9	67.9	49.9	No		
12		2022-10-25	13:45:22	64.0	71.3	50.4	No		
13		2022-10-25	13:46:22	58.9	70.0	53.7	No		
14		2022-10-25	13:47:22	60.9	69.6	52.1	No		
15		2022-10-25	13:48:22	55.6	66.3	50.4	No		
16		2022-10-25	13:49:22	58.6	68.4	49.0	No		
17		2022-10-25	13:50:22	57.4	66.6	48.6	No		
18	Stop	2022-10-25	13:50:54						

Summary

File Name on Meter	831_Data.073.s
File Name on PC	831_0002783-20221025 140651-831_Data.073.ldbin
Serial Number	0002783
Model	Model 831
Firmware Version	2.403
User	
Location	ST-5: Corner of Fig Avenue and Airport Way
Job Description	
Note	

Measurement

Description	
Start	2022-10-25 14:06:51
Stop	2022-10-25 14:22:05
Duration	00:15:13.4
Run Time	00:15:13.4
Pause	00:00:00.0
Pre-Calibration	2022-10-25 12:45:24
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	144.7 dB

	A	C	Z	
Under Range Peak	77.2	74.2	**79.2**	dB
Under Range Limit	**26.7**	27.2	33.2	dB
Noise Floor	17.6	18.1	23.6	dB

	First	Second	Third
Instrument Identification			

Results

LAeq	70.3		
LAE	99.9		
EA	1.091	mPa^2h	
LZpeak (max)	2022-10-25 14:11:53	107.6	dB
LASmax	2022-10-25 14:15:47	82.4	dB
LASmin	2022-10-25 14:12:24	41.0	dB
SEA	-99.9	dB	

	Exceedance Counts	Duration	
LAS > 65.0 dB	38	423.5	s
LAS > 85.0 dB	0	0.0	s
LZpeak > 135.0 dB	0	0.0	s
LZpeak > 137.0 dB	0	0.0	s
LZpeak > 140.0 dB	0	0.0	s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**	
	70.3	70.3	-99.9	70.3	70.3	-99.9	-99.9	dB

LCeq	74.4	dB
LAeq	70.3	dB
LCeq - LAeq	4.1	dB
LAleq	72.8	dB
LAeq	70.3	dB
LAleq - LAeq	2.5	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	70.3		74.4		82.4	
LS(max)	82.4	2022/10/25 14:15:47	89.2	2022/10/25 14:15:47	96.0	2022/10/25 14:11:53
LF(max)	85.9	2022/10/25 14:21:35	91.7	2022/10/25 14:15:46	102.0	2022/10/25 14:11:53
LI(max)	86.9	2022/10/25 14:21:35	92.4	2022/10/25 14:15:46	104.8	2022/10/25 14:11:53
LS(min)	41.0	2022/10/25 14:12:24	57.4	2022/10/25 14:15:13	65.3	2022/10/25 14:07:07
LF(min)	40.3	2022/10/25 14:15:05	54.6	2022/10/25 14:09:58	62.5	2022/10/25 14:19:35
LI(min)	40.7	2022/10/25 14:12:23	58.1	2022/10/25 14:11:23	66.6	2022/10/25 14:07:05
LPeak(max)	96.9	2022/10/25 14:21:35	103.0	2022/10/25 14:21:35	107.6	2022/10/25 14:11:53

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	0	
OBA Overload Duration	0.0	s

Statistics

LA 5.00	77.0	dB
LA 10.00	75.4	dB
LA 33.30	68.1	dB
LA 50.00	62.3	dB
LA 66.60	56.5	dB
LA 90.00	47.3	dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD	Marker	Comments
1	Run	2022-10-25	14:06:51						
2		2022-10-25	14:06:51	67.8	79.5	45.6	No		
3		2022-10-25	14:07:51	72.0	79.9	57.0	No		
4		2022-10-25	14:08:51	67.1	77.0	48.3	No		
5		2022-10-25	14:09:51	69.0	79.3	41.6	No		
6		2022-10-25	14:10:51	68.0	79.5	45.6	No		
7		2022-10-25	14:11:51	66.0	79.7	41.0	No		
8		2022-10-25	14:12:51	71.7	79.9	46.3	No		
9		2022-10-25	14:13:51	71.2	79.8	51.0	No		
10		2022-10-25	14:14:51	70.3	82.4	41.2	No		
11		2022-10-25	14:15:51	69.8	77.2	56.6	No		
12		2022-10-25	14:16:51	71.6	78.9	47.9	No		
13		2022-10-25	14:17:51	69.8	77.5	44.8	No		
14		2022-10-25	14:18:51	72.9	81.7	56.7	No		
15		2022-10-25	14:19:51	69.0	77.7	43.8	No		
16		2022-10-25	14:20:51	72.1	82.1	48.1	No		
17		2022-10-25	14:21:51	69.5	76.3	59.7	No		
18	Stop	2022-10-25	14:22:05						

Summary

File Name on Meter	LxT_Data.107.s
File Name on PC	LxT_0004337-20221025 120000-LxT_Data.107.ldbir
Serial Number	0004337
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	LT-1: Eastside of Honorable Sandra B. Smith Park, adjacent to San Joaquin Rivei
Job Description	
Note	

Measurement

Description	
Start	2022-10-25 12:00:00
Stop	2022-10-27 12:00:00
Duration	48:00:00.0
Run Time	48:00:00.0
Pause	00:00:00.0
Pre-Calibration	2022-10-25 10:47:38
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT2B
Microphone Correction	Off
Integration Method	Linear
Overload	143.3 dB

	A	C	Z
Under Range Peak	99.5	96.5	**101.5** dB
Under Range Limit	**37.9**	37.4	44.2 dB
Noise Floor	28.7	28.3	35.1 dB

	First	Second	Third
Instrument Identification			

Results

LAeq	48.8	
LAE	101.2	
EA	1.465	mPa²h
EA8	244.170	µPa²h
EA40	1.221	mPa²h
LZpeak (max)	2022-10-26 16:11:10	111.3 dB
LASmax	2022-10-25 17:40:35	80.0 dB
LASmin	2022-10-26 02:41:19	31.3 dB
SEA	-99.9	dB

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LZpeak > 135.0 dB	0	0.0 s
LZpeak > 137.0 dB	0	0.0 s
LZpeak > 140.0 dB	0	0.0 s

LCeq	59.2	dB
LAeq	48.8	dB
LCeq - LAeq	10.4	dB
LAleq	54.5	dB
LAeq	48.8	dB
LAleq - LAeq	5.7	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	48.8		59.2			
LS(max)	80.0	2022/10/25 17:40:35				
LS(min)	31.3	2022/10/26 2:41:19				
LPeak(max)					111.3	2022/10/26 16:11:10

Overload Count	0	
Overload Duration	0.0	s

Dose Settings

Dose Name	OSHA-1	OSHA-2	
Exchange Rate	5	5	dB
Threshold	90	80	dB
Criterion Level	90	90	dB
Criterion Duration	8	8	h

Results

Dose	1.45	1.45	%
Projected Dose	0.24	0.24	%
TWA (Projected)	46.5	46.5	dB
TWA (t)	59.5	59.5	dB
Lep (t)	56.6	56.6	dB

Statistics

LA 2.00	55.9	dB
LA 8.00	50.8	dB
LA 25.00	47.4	dB
LA 50.00	44.4	dB
LA 66.60	42.3	dB
LA 90.00	39.2	dB

Record #	Record Type	Date	Time	LAeq	LZpeak	LASmax	LASmin	OVLD	Marker	Comments
1	Run	2022-10-25	12:00:00							
2		2022-10-25	12:00:00	42.3	103.8	55.0	35.3	No		
3		2022-10-25	13:00:00	43.3	101.5	62.5	35.3	No		
4		2022-10-25	14:00:00	55.5	98.4	79.8	36.2	No		
5		2022-10-25	15:00:00	47.3	96.0	74.1	35.4	No		
6		2022-10-25	16:00:00	52.5	99.8	74.0	39.3	No		
7		2022-10-25	17:00:00	58.1	96.6	80.0	38.4	No		
8		2022-10-25	18:00:00	45.7	86.4	65.8	36.7	No		
9		2022-10-25	19:00:00	45.0	86.0	66.3	36.2	No		
10		2022-10-25	20:00:00	41.6	88.7	56.5	36.0	No		
11		2022-10-25	21:00:00	40.1	83.0	57.7	34.4	No		
12		2022-10-25	22:00:00	40.7	80.1	59.2	35.2	No		
13		2022-10-25	23:00:00	41.3	85.8	51.4	37.2	No		
14		2022-10-26	0:00:00	42.2	82.7	62.7	36.1	No		
15		2022-10-26	1:00:00	40.5	85.9	55.2	33.6	No		
16		2022-10-26	2:00:00	38.2	72.8	52.3	31.3	No		
17		2022-10-26	3:00:00	43.2	75.6	56.0	33.9	No		
18		2022-10-26	4:00:00	43.9	76.8	58.3	37.4	No		
19		2022-10-26	5:00:00	44.5	84.0	52.8	38.9	No		
20		2022-10-26	6:00:00	46.6	81.1	62.1	41.3	No		
21		2022-10-26	7:00:00	48.2	83.7	61.1	41.8	No		
22		2022-10-26	8:00:00	49.2	92.2	56.2	45.1	No		
23		2022-10-26	9:00:00	46.7	101.6	60.7	41.8	No		
24		2022-10-26	10:00:00	46.7	104.1	58.1	39.7	No		
25		2022-10-26	11:00:00	46.0	103.9	69.3	38.5	No		
26		2022-10-26	12:00:00	44.8	106.0	59.4	38.1	No		
27		2022-10-26	13:00:00	47.3	108.7	63.1	38.0	No		
28		2022-10-26	14:00:00	50.9	107.7	72.4	39.3	No		
29		2022-10-26	15:00:00	55.4	110.0	76.4	42.3	No		
30		2022-10-26	16:00:00	53.9	111.3	78.9	42.0	No		
31		2022-10-26	17:00:00	50.8	102.1	76.8	41.7	No		
32		2022-10-26	18:00:00	49.0	93.9	69.6	41.8	No		
33		2022-10-26	19:00:00	49.3	88.2	71.7	40.4	No		
34		2022-10-26	20:00:00	44.0	89.3	60.8	36.8	No		
35		2022-10-26	21:00:00	47.7	95.3	67.2	37.9	No		
36		2022-10-26	22:00:00	45.8	78.8	56.0	41.3	No		
37		2022-10-26	23:00:00	44.7	78.8	57.2	40.6	No		
38		2022-10-27	0:00:00	43.7	77.4	57.8	37.1	No		
39		2022-10-27	1:00:00	42.8	79.4	50.2	38.5	No		
40		2022-10-27	2:00:00	43.4	80.4	53.4	37.6	No		
41		2022-10-27	3:00:00	46.0	79.1	59.0	41.9	No		
42		2022-10-27	4:00:00	46.5	80.9	56.3	43.7	No		
43		2022-10-27	5:00:00	47.6	79.4	57.8	43.5	No		
44		2022-10-27	6:00:00	49.7	80.1	60.6	46.3	No		
45		2022-10-27	7:00:00	50.3	84.9	57.9	47.1	No		
46		2022-10-27	8:00:00	49.4	85.5	62.3	44.6	No		
47		2022-10-27	9:00:00	47.8	91.5	65.8	39.8	No		
48		2022-10-27	10:00:00	43.9	94.3	59.1	37.3	No		
49		2022-10-27	11:00:00	43.2	94.0	65.5	35.0	No		
50	Stop	2022-10-27	12:00:00							

Summary

File Name on Meter	LxT_Data.144.s
File Name on PC	LxT_0004435-20221025 130000-LxT_Data.144.ldbir
Serial Number	0004435
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	LT-2: Across the street from residences where Lathrop Road meets Spartan Way
Job Description	
Note	

Measurement

Description		
Start	2022-10-25	13:00:00
Stop	2022-10-27	13:00:00
Duration		48:00:00.0
Run Time		48:00:00.0
Pause		00:00:00.0
Pre-Calibration	2022-10-25	12:08:32
Post-Calibration		None
Calibration Deviation		---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT2B
Microphone Correction	Off
Integration Method	Exponential
Overload	144.1 dB

	A	C	Z
Under Range Peak	100.3	97.3	**102.3** dB
Under Range Limit	**38.6**	38.2	45.0 dB
Noise Floor	29.5	29.1	35.9 dB

	First	Second	Third
Instrument Identification			

Results

LASeq	56.5	
LASE	108.9	
EAS	8.553	mPa²h
EAS8	1.426	mPa²h
EAS40	7.128	mPa²h
LZpeak (max)	2022-10-25 14:11:51	116.0 dB
LASmax	2022-10-25 22:22:41	84.6 dB
LASmin	2022-10-25 18:49:04	31.7 dB
SEA	-99.9	dB

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LZpeak > 135.0 dB	0	0.0 s
LZpeak > 137.0 dB	0	0.0 s
LZpeak > 140.0 dB	0	0.0 s

LCSeq	66.1	dB
LASeq	56.5	dB
LCSeq - LASeq	9.6	dB
LAleq	58.9	dB
LAeq	56.5	dB
LAleq - LAeq	2.4	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	56.5					
LS(max)	84.6	2022/10/25 22:22:41				
LS(min)	31.7	2022/10/25 18:49:04				
LPeak(max)					116.0	2022/10/25 14:11:51

Overload Count	0	
Overload Duration	0.0	s

Dose Settings

Dose Name	OSHA-1	OSHA-2	
Exchange Rate	5	5	dB
Threshold	90	80	dB
Criterion Level	90	90	dB
Criterion Duration	8	8	h

Results

Dose	2.95	2.95	%
Projected Dose	0.49	0.49	%
TWA (Projected)	51.6	51.6	dB
TWA (t)	64.6	64.6	dB
Lep (t)	64.3	64.3	dB

Statistics

LAS 5.00	62.4	dB
LAS 10.00	57.1	dB
LAS 33.30	46.4	dB
LAS 50.00	42.6	dB
LAS 66.60	40.6	dB
LAS 90.00	38.0	dB

Record #	Record Type	Date	Time	LASeq	LASmax	LASmin	OVLD	Marker	Comments
1	Calibration Change	2022-10-25	12:08:32						
2	Run	2022-10-25	13:00:00						
3		2022-10-25	13:00:00	57.6	76.3	40.4	No		
4		2022-10-25	14:00:00	58.5	79.8	39.4	No		
5		2022-10-25	15:00:00	61.0	78.4	40.2	No		
6		2022-10-25	16:00:00	57.6	77.5	36.1	No		
7		2022-10-25	17:00:00	58.5	83.3	35.3	No		
8		2022-10-25	18:00:00	56.2	73.5	31.7	No		
9		2022-10-25	19:00:00	56.6	75.3	33.2	No		
10		2022-10-25	20:00:00	55.6	75.0	34.0	No		
11		2022-10-25	21:00:00	50.1	77.2	35.7	No		
12		2022-10-25	22:00:00	57.4	84.6	35.9	No		
13		2022-10-25	23:00:00	46.0	71.4	36.0	No		
14		2022-10-26	0:00:00	45.9	71.3	36.9	No		
15		2022-10-26	1:00:00	41.7	67.7	35.6	No		
16		2022-10-26	2:00:00	43.8	67.4	36.9	No		
17		2022-10-26	3:00:00	50.1	72.7	39.0	No		
18		2022-10-26	4:00:00	49.2	73.4	37.5	No		
19		2022-10-26	5:00:00	51.0	75.6	37.8	No		
20		2022-10-26	6:00:00	54.6	76.7	38.5	No		
21		2022-10-26	7:00:00	58.1	79.6	38.4	No		
22		2022-10-26	8:00:00	57.4	77.9	42.3	No		
23		2022-10-26	9:00:00	60.7	75.0	41.1	No		
24		2022-10-26	10:00:00	57.9	78.4	42.2	No		
25		2022-10-26	11:00:00	56.8	74.0	41.8	No		
26		2022-10-26	12:00:00	62.0	83.5	38.2	No		
27		2022-10-26	13:00:00	58.3	80.9	39.1	No		
28		2022-10-26	14:00:00	57.8	79.0	37.5	No		
29		2022-10-26	15:00:00	60.0	76.0	36.8	No		
30		2022-10-26	16:00:00	58.0	82.1	36.6	No		
31		2022-10-26	17:00:00	58.7	76.5	35.3	No		
32		2022-10-26	18:00:00	57.8	82.5	33.9	No		
33		2022-10-26	19:00:00	57.4	76.4	33.0	No		
34		2022-10-26	20:00:00	55.8	77.3	33.7	No		
35		2022-10-26	21:00:00	51.4	73.2	36.7	No		
36		2022-10-26	22:00:00	51.3	75.0	36.6	No		
37		2022-10-26	23:00:00	46.9	72.9	36.1	No		
38		2022-10-27	0:00:00	47.1	70.3	37.6	No		
39		2022-10-27	1:00:00	47.0	75.1	34.9	No		
40		2022-10-27	2:00:00	40.1	52.3	34.1	No		
41		2022-10-27	3:00:00	44.9	69.3	38.7	No		
42		2022-10-27	4:00:00	50.6	77.0	37.9	No		
43		2022-10-27	5:00:00	51.8	78.5	36.1	No		
44		2022-10-27	6:00:00	56.4	76.6	34.5	No		
45		2022-10-27	7:00:00	57.0	74.6	36.6	No		
46		2022-10-27	8:00:00	60.0	79.9	43.9	No		
47		2022-10-27	9:00:00	57.3	79.6	37.5	No		
48		2022-10-27	10:00:00	57.8	82.5	35.0	No		
49		2022-10-27	11:00:00	57.2	76.3	38.2	No		
50		2022-10-27	12:00:00	57.2	77.6	35.6	No		
51	Stop	2022-10-27	13:00:00						

Summary

File Name on Meter	831_Data.074.s
File Name on PC	831_0002783-20221025 160000-831_Data.074.ldbin
Serial Number	0002783
Model	Model 831
Firmware Version	2.403
User	
Location	LT-3: Across Lathrop Irrigation District on Manthey Road
Job Description	
Note	

Measurement

Description	
Start	2022-10-25 16:00:00
Stop	2022-10-27 16:00:00
Duration	48:00:00.0
Run Time	48:00:00.0
Pause	00:00:00.0
Pre-Calibration	2022-10-25 12:45:24
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	144.7 dB

	A	C	Z	
Under Range Peak	77.2	74.2	**79.2**	dB
Under Range Limit	**26.7**	27.2	33.2	dB
Noise Floor	17.6	18.1	23.6	dB

	First	Second	Third
Instrument Identification			

Results

LAeq	75.4		
LAE	127.8		
EA	662.451	mPa²h	
LZpeak (max)	2022-10-26 08:18:44	120.7	dB
LASmax	2022-10-26 08:18:45	98.3	dB
LASmin	2022-10-26 01:07:14	56.4	dB
SEA	130.7	dB	

	Exceedance Counts	Duration	
LAS > 65.0 dB	95	170782.4	s
LAS > 85.0 dB	240	708.0	s
LZpeak > 135.0 dB	0	0.0	s
LZpeak > 137.0 dB	0	0.0	s
LZpeak > 140.0 dB	0	0.0	s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**	
	80.9	75.9	74.3	81.2	76.1	74.7	74.3	dB

LCeq	81.3	dB
LAeq	75.4	dB
LCeq - LAeq	5.9	dB
LAleq	76.6	dB
LAeq	75.4	dB
LAleq - LAeq	1.2	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	75.4		81.3		84.1	
LS(max)	98.3	2022/10/26 8:18:45	108.5	2022/10/25 23:41:36	108.6	2022/10/25 23:41:36
LF(max)	101.8	2022/10/26 8:18:44	110.5	2022/10/25 23:41:36	110.6	2022/10/25 23:41:36
LI(max)	102.9	2022/10/26 8:18:44	111.2	2022/10/25 23:41:36	111.3	2022/10/25 23:41:36
LS(min)	56.4	2022/10/26 1:07:14	62.5	2022/10/26 1:07:14	65.6	2022/10/26 1:07:14
LF(min)	55.7	2022/10/26 1:07:10	61.3	2022/10/26 1:07:11	63.8	2022/10/26 1:07:14
LI(min)	56.0	2022/10/26 1:07:10	62.8	2022/10/26 1:07:14	66.8	2022/10/26 1:07:14
LPeak(max)	118.8	2022/10/26 8:18:44	120.0	2022/10/26 8:18:44	120.7	2022/10/26 8:18:44

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	48	
OBA Overload Duration	119.6	s

Statistics

LA 5.00	78.2	dB
LA 10.00	77.4	dB
LA 33.30	75.7	dB
LA 50.00	74.7	dB
LA 66.60	73.4	dB
LA 90.00	69.8	dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD	Marker	Comments
1	Run	2022-10-25	16:00:00						
2		2022-10-25	16:00:00	75.5	91.8	64.1	No		
3		2022-10-25	17:00:00	75.7	92.3	68.2	No		
4		2022-10-25	18:00:00	75.4	93.7	66.3	No		
5		2022-10-25	19:00:00	75.2	96.1	66.5	No		
6		2022-10-25	20:00:00	74.3	88.3	66.4	No		
7		2022-10-25	21:00:00	73.7	89.7	64.1	No		
8		2022-10-25	22:00:00	71.8	80.3	63.0	No		
9		2022-10-25	23:00:00	72.2	98.1	63.0	No		
10		2022-10-26	0:00:00	70.4	87.9	59.5	No		
11		2022-10-26	1:00:00	70.2	81.9	56.4	No		
12		2022-10-26	2:00:00	72.0	80.5	60.3	No		
13		2022-10-26	3:00:00	75.2	81.7	64.1	No		
14		2022-10-26	4:00:00	76.1	81.5	69.8	No		
15		2022-10-26	5:00:00	76.4	83.7	69.5	No		
16		2022-10-26	6:00:00	76.5	91.1	70.3	No		
17		2022-10-26	7:00:00	77.4	95.9	71.1	No		
18		2022-10-26	8:00:00	77.8	98.3	69.1	No		
19		2022-10-26	9:00:00	76.5	92.1	68.9	No		
20		2022-10-26	10:00:00	75.8	90.7	67.8	No		
21		2022-10-26	11:00:00	75.8	91.5	67.8	No		
22		2022-10-26	12:00:00	76.1	94.6	67.3	No		
23		2022-10-26	13:00:00	76.2	92.2	68.2	No		
24		2022-10-26	14:00:00	76.2	93.9	67.5	No		
25		2022-10-26	15:00:00	75.7	92.4	67.0	No		
26		2022-10-26	16:00:00	75.6	94.4	67.2	No		
27		2022-10-26	17:00:00	75.8	90.8	68.2	No		
28		2022-10-26	18:00:00	75.5	90.3	67.0	No		
29		2022-10-26	19:00:00	74.9	90.6	65.8	No		
30		2022-10-26	20:00:00	75.0	96.9	65.3	No		
31		2022-10-26	21:00:00	75.2	93.0	66.6	No		
32		2022-10-26	22:00:00	73.3	93.7	62.5	No		
33		2022-10-26	23:00:00	72.1	93.6	62.3	No		
34		2022-10-27	0:00:00	71.2	84.6	61.9	No		
35		2022-10-27	1:00:00	71.4	81.5	61.5	No		
36		2022-10-27	2:00:00	72.9	86.8	59.4	No		
37		2022-10-27	3:00:00	75.5	82.4	64.7	No		
38		2022-10-27	4:00:00	76.4	89.2	68.5	No		
39		2022-10-27	5:00:00	76.6	84.1	70.7	No		
40		2022-10-27	6:00:00	76.2	85.0	70.0	No		
41		2022-10-27	7:00:00	77.1	88.4	70.5	No		
42		2022-10-27	8:00:00	77.2	91.8	69.9	No		
43		2022-10-27	9:00:00	76.3	92.0	67.5	No		
44		2022-10-27	10:00:00	75.9	89.5	66.8	No		
45		2022-10-27	11:00:00	76.3	94.1	67.7	No		
46		2022-10-27	12:00:00	75.8	91.9	67.8	No		
47		2022-10-27	13:00:00	75.5	86.4	65.1	No		
48		2022-10-27	14:00:00	75.6	88.2	67.0	No		
49		2022-10-27	15:00:00	76.3	88.5	66.1	No		
50	Stop	2022-10-27	16:00:00						

Calculated Ldn from Long-Term Noise Monitoring Data

Meter 4337 LT-1
10/26/2022
Wednesday

		TIME	dBA	Numbers...	More Numbers...	10 dBA	5 dBA
Midnight		0 / 24	42.2	16664	166638	52696	
am	1:00	100	40.5	11186	111856	35372	
	2:00	200	38.2	6638	66376	20990	
	3:00	300	43.2	20875	208746	66011	
	4:00	400	43.9	24496	244965	77465	
	5:00	500	44.5	28085	280846	88811	
	6:00	600	46.6	45979	459785	145397	
	7:00	700	48.2	65371	653708	206721	
	8:00	800	49.2	83912	839120	265353	
	9:00	900	46.7	47058	470583	148811	
	10:00:AM	1000	46.7	46405	464051	146746	
	11:00: AM	1100	46.0	39987	399866	126449	
	12:00:PM	1200	44.8	30012	300119	94906	
pm	1:00	1300	47.3	53764	537643	170018	
	2:00	1400	50.9	122191	1221909	386402	
	3:00	1500	55.4	350737	3507365	1109126	
	4:00	1600	53.9	247199	2471986	781711	
	5:00	1700	50.8	121554	1215536	384386	
	6:00	1800	49.0	79303	793025	250777	
	7:00	1900	49.3	85919	859188	271699	
	8:00	2000	44.0	25089	250894	79340	
	9:00	2100	47.7	59031	590313	186673	
	10:00: AM	2200	45.8	37668	376678	119116	
pm	11:00: AM	2300	44.7	29504	295039	93299	

Leq Nighttime 8:00 p.m.-8:00 p.m. (not penalized)
46 dBA

Leq Daytime 8:00 am-8:00 p.m.
50 dBA

Leq 24-Hour
48 dBA

Ldn: 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.
52 dBA

CNEL: 5 dBA penalty for noise between 7:00p.m. and 10:00 p.m., and 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.
52 dBA

CNEL - Ldn 0.414816

Calculated Ldn from Long-Term Noise Monitoring Data

Meter 4335 LT-2
10/26/2022
Wednesday

			TIME	dBA	10 dBA Numbers...	More Numbers...	5 dBA
Midnight		0 / 24		45.9	38884	388844	122963
am	1:00	100		41.7	14809	148086	46829
	2:00	200		43.8	24040	240402	76022
	3:00	300		50.1	101923	1019227	322308
	4:00	400		49.2	82524	825243	260965
	5:00	500		51.0	125418	1254180	396607
	6:00	600		54.6	288166	2881655	911259
	7:00	700		58.1	652280	6522799	2062690
	8:00	800		57.4	548214	5482138	1733604
	9:00	900		60.7	1184808	11848081	3746692
	10:00:AM	1000		57.9	612049	6120487	1935468
	11:00: AM	1100		56.8	475824	4758236	1504686
	12:00:PM	1200		62.0	1599050	15990498	5056640
pm	1:00	1300		58.3	674090	6740902	2131660
	2:00	1400		57.8	605726	6057257	1915473
	3:00	1500		60.0	996857	9968573	3152340
	4:00	1600		58.0	625291	6252907	1977343
	5:00	1700		58.7	744542	7445417	2354447
	6:00	1800		57.8	606984	6069837	1919451
	7:00	1900		57.4	551054	5510538	1742585
	8:00	2000		55.8	379474	3794740	1200002
	9:00	2100		51.4	137371	1373713	434406
	10:00: AM	2200		51.3	133521	1335214	422232
pm	11:00: AM	2300		46.9	48580	485799	153623

Leq Nighttime 8:00 p.m.-8:00 p.m. (not penalized)
54 dBA

Leq Daytime 8:00 am-8:00 p.m.
59 dBA

Leq 24-Hour
57 dBA

Ldn: 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.
59 dBA

CNEL: 5 dBA penalty for noise between 7:00p.m. and 10:00 p.m., and 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.
59 dBA

CNEL - Ldn 0.498802

Calculated Ldn from Long-Term Noise Monitoring Data

Meter 2783 LT-3
10/26/2022
Wednesday

		TIME	dBA	Numbers...	10 dBA More Numbers...	5 dBA
Midnight		0 / 24	70.4	10927404	109274040	34555486
am	1:00	100	70.2	10542000	105419997	33336730
	2:00	200	72.0	16027323	160273234	50682847
	3:00	300	75.2	33170346	331703459	104893844
	4:00	400	76.1	40915796	409157956	129387106
	5:00	500	76.4	43584393	435843928	137825952
	6:00	600	76.5	44677617	446776169	141283030
	7:00	700	77.4	55310171	553101709	174906118
	8:00	800	77.8	60223778	602237785	190444309
	9:00	900	76.5	44495081	444950808	140705800
	10:00:AM	1000	75.8	37674630	376746304	119137642
	11:00: AM	1100	75.8	38430762	384307624	121528741
	12:00:PM	1200	76.1	40646018	406460175	128533993
pm	1:00	1300	76.2	42010998	420109981	132850441
	2:00	1400	76.2	41873089	418730890	132414334
	3:00	1500	75.7	37582442	375824424	118846118
	4:00	1600	75.6	35964829	359648290	113730775
	5:00	1700	75.8	38417491	384174912	121486774
	6:00	1800	75.5	35600410	356004100	112578381
	7:00	1900	74.9	31146123	311461234	98492690
	8:00	2000	75.0	31568577	315685766	99828604
	9:00	2100	75.2	32811040	328110403	103757620
	10:00: AM	2200	73.3	21622106	216221064	68375104
pm	11:00: AM	2300	72.1	16166760	161667603	51123785

Leq Nighttime 8:00 p.m.-8:00 p.m. (not penalized)
76 dBA

Leq Daytime 8:00 am-8:00 p.m.
76 dBA

Leq 24-Hour
75 dBA

Ldn: 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.
81 dBA

CNEL: 5 dBA penalty for noise between 7:00p.m. and 10:00 p.m.,
81 dBA **and 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.**

CNEL - Ldn 0.29104