Appendix A

February 2022 Notice of Preparation and Comment Letters

CITY OF ROSEVILLE PLANNING DEPARTMENT
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

NOTICE OF PREPARATION

Date:	February 25, 2022
To:	State Clearinghouse Responsible Agencies Trustee Agencies Interested Parties
Subject:	Notice of Preparation of a Supplement to the Kaiser Permanente Roseville Medical Center Expansion Project Environmental Impact Report (SCH # 2003062014) for the proposed Inpatient Bed Tower Project
Project Title/File Number:	Kaiser Permanente Roseville Medical Center Inpatient Bed Tower File number: PL 22-0038
NOP Comment Period:	End of posting period is March 28, 2022 at 5:00 p.m.
Project Location:	1600 Eureka Road, Roseville 95661 APN 048-012-001
Project Applicant:	Kaiser Foundation Hospitals Attn: Skyler Denniston, Director, Land Use & Entitlements 393 E. Walnut Street, 4th Floor Pasadena, CA 91188
Property Owner:	Kaiser Foundation Hospitals
Lead Agency and Contact Person:	Kinarik Shallow, Associate Planner City of Roseville Planning Department 311 Vernon Street Roseville, CA 95678 (916) 746-1347 Fax: (916) 774-5219 Email: kshallow@roseville.ca.us Website: www.roseville.ca.us

INTRODUCTION

The City of Roseville (City) will be the lead agency for the Roseville Medical Center Inpatient Bed Tower project ("Proposed Project" or "Project"). This Notice of Preparation (NOP) has been issued to notify responsible and trustee agencies and other interested parties that the City will be preparing a Supplement to the Kaiser Permanente Roseville Medical Center Expansion Project Environmental Impact Report (SCH #2003062014) (2004 EIR) that evaluated expansion of the existing Kaiser Permanente Medical Center site located at 1600 Eureka Road. To address updates to what was previously approved, a Supplemental Environmental Impact Report (SEIR) is proposed for the Project. The purpose of this NOP is to solicit feedback on the scope and content of the analysis to be evaluated in the SEIR.

The SEIR will evaluate changes in the physical environment that could occur as a result of approval of the Proposed Project and whether these issues would result in new or substantially more severe significant impacts than identified in the 2004 EIR. This SEIR is being prepared by the City in compliance with Section 15163 of the California Environmental Quality Act (CEQA) to evaluate potential significant environmental effects associated with implementation of the Proposed Project and to recommend mitigation measures, as required.

The Proposed Project description, location map, vicinity map, and site plan are provided in this NOP and are also available on the City's website:

https://www.roseville.ca.us/environmentaldocuments.

NOP Comment Period: Due to the time limits mandated by state law, your response to this NOP must be sent no later than 30 calendar days after receipt of this notice and should be received by March 28, 2022 (30 days after the date this notice was first posted). Please submit comments to City of Roseville no later than 5 p.m. on March 28, 2022. Please provide written comments to:

Kinarik Shallow, Associate Planner
City of Roseville Planning Department
311 Vernon Street
Roseville, CA 95678
Phone: (916) 746-1309
Fax: (916) 774-5129
Email: kshallow@roseville.ca.us

PROJECT BACKGROUND

In April 2004, the City approved the Kaiser Permanente Roseville Medical Center Expansion Project (2004 Expansion Project) and certified the 2004 EIR. The 2004 Expansion Project included construction and operation of a 705,360 square-foot expansion to the existing Kaiser Permanente Medical Center (Medical Center) located at 1600 Eureka Road. The Medical Center currently contains over one million square feet of medical facilities, 352 inpatient beds, and 3,077 parking spaces. The 2004 Expansion Project approvals included a five-story, 155,000 gross-square-foot Surgery and Intensive Care Unit Facility located along the north elevation of the existing main hospital building, and a three-level approximately 400-space parking garage located in the northeast corner of the site. Neither the Surgery and Intensive Care Unit Facility nor the three-story parking garage have been constructed, although those sites have been developed in the interim with approximately 851 surface parking spaces.

The 2004 Expansion Project EIR evaluated the following issue areas:

- Land Use and Planning
- Visual Resources
- Air Quality
- Hydrology and Water Quality
- Population/Employment/Housing
- Public Services
- Noise
- Utilities
- Traffic and Circulation

The City determined any potential Project effects in the following issue areas would be less than significant and would not require further evaluation in the 2004 EIR:

- Geology
- Biological Resources
- Cultural Resources
- Energy/Mineral Resources
- Hazards
- Recreation

Project Location

The Project site (Property) is located on the existing 49-acre Medical Center campus at 1600 Eureka Road, as shown in Figure 1, Regional Location and Project Site. The Property is bordered by Lead Hill Boulevard on the north, Douglas Boulevard on the south, Eureka Road on the east, and Rocky Ridge Drive on the west. Adjacent commercial and office uses surround the Property.

The Property's assessor's parcel number (APN) is 048-012-001.

PROJECT DESCRIPTION

The Proposed Project would increase the size and capacity of the previously approved 2004 Expansion Project. Specifically, the Proposed Project revises the 2004 Expansion Project to allow for an approximately 278,000 square-foot, six-story, 138-bed Inpatient Tower building (on the site of the prior approved Surgery and Intensive Care Unit Facility); a relocation of the northwest corner loop road; and a new four-level garage with rooftop parking to accommodate approximately 800 stalls located in the northeast corner of the campus (on the site of the prior approved parking garage); a new main hospital entrance and drop off area; expansion of the existing Emergency Department to add 36 new treatment bays; and a new generator yard and internal upgrades to the existing Central Utility Plant (CUP).

The Proposed Project would be constructed on portions of the Property currently occupied by surface parking lots.

Project Setting and Surrounding Land Uses

The Property is currently developed with seven buildings totaling 1,441,750 square feet that comprise the Medical Center, along with 3,077 surface and garage parking spaces and associated signage and landscaping. The Property is designated Business Professional (BP) on the City's General Plan land use map (last updated September 2015) and the City's Northeast Roseville Specific Plan. The Property is

zoned Planned Development for Medical Campus (PD 470). Uses permitted include professional offices and general medical services.

The Property is primarily developed with buildings and surface parking lots; however, there are areas of landscaping along the perimeter of, and internal to, the Property. A number of landscape trees are present throughout the Property. Although existing trees and landscaping would be removed to accommodate the Project, there are no mature or protected trees on site and new landscaping would be designed to enhance the areas within the Project boundary. The elevation of the Property varies from approximately 200 feet to 235 feet above mean sea level.

Proposed Project Elements

The Project applicant proposes to develop an approximately 278,000 square-foot, six-story (107-foot tall) inpatient hospital building that includes 138 beds (108 medical beds, 30 ICU beds), six additional operating rooms, 36 additional Emergency Department treatment bays, and an in-patient pharmacy in the portion of the Property previously approved for the 2004 Expansion Project's Surgery and Intensive Care Unit Facility. Other proposed improvements include relocating the northwest portion of the campus loop road and creating a new main entrance and patient drop off area for both the new hospital tower and the existing Emergency Department. A new four-level plus rooftop (47-foot tall) 800 stall parking structure is proposed in the northeast corner of the campus in an area previously approved for a parking structure as part of the 2004 Expansion Project. In addition, the Project includes internal renovations to the CUP building and a new emergency generator yard. The Project site plan is shown in Figure 2. The SEIR will evaluate the potential environmental effects associated with the net new increase in square footage and building height of the new inpatient tower and parking structure.

Project Access and Parking

The new main entry and patient drop-off to the Medical Center would be from Rocky Ridge Drive, as shown in Figure 2, Site Plan. The main entry would include a public two-way driveway and direct access to a new hospital drop-off area fronting the new hospital entrance atrium and plaza.

Existing access to the Property from Lead Hill Boulevard, Eureka Road and Douglas Boulevard would not change. Access to the new parking structure would be via the existing Medical Center entry off Eureka Road, which is directly south of the proposed parking structure. A new driveway off Lead Hill Boulevard, near Rocky Ridge Drive may be constructed to provide additional access to the Property.

A temporary parking lot currently under construction at 2130 Douglas Boulevard would provide interim parking for Kaiser Permanente employees during construction.

Lighting and Landscaping

It is anticipated that the Project's landscaping would use native and drought resistant plants where feasible and would comply with the City's Water Efficient Landscape Ordinance. Since the Project is an expansion to an existing Medical Center, the landscaping plan is designed to blend with the existing plant palette and species that are currently on the Property. Based on an arborist survey

completed in January 2022, there are no protected trees on the Property that would require compliance with the City's Municipal Code Chapter 19.66, Tree Preservation.

Project lighting would be provided in the surface parking areas and within the landscaped areas around the building to provide required illumination along pathways for security as well as for aesthetics.

Sustainability Features

The Proposed Project will be designed to meet Kaiser Permanente's sustainability requirements, which include Leadership in Energy and Environmental Design (LEED) Gold certification or equivalent. The Project must also comply with the most recent update to the California Energy Code, Title 24.

Public Utilities

The new inpatient hospital building would tie into existing water, wastewater and storm drain lines, as well as dry utilities that serve the existing Medical Center buildings. Should additional capacity of the existing on-site utilities be required as part of the Proposed Project, upgrades or improvements would be completed during construction.

Construction Timeline

Construction of the Project, if approved, would take approximately 48 months to complete. Site grading would take approximately 12 months followed by trenching for utilities and construction of the buildings. The intent is to have the parking structure built first in order to provide sufficient parking on site while the new inpatient hospital building and loop road relocation are being constructed on the northwest corner of the Property.

Kaiser Permanente contracts with unionized labor for all construction work and would do so for this Project.

PROJECT APPROVALS

This SEIR will serve as the environmental document for City approvals and any permits required from other governmental bodies for Project construction and operation. The SEIR will analyze construction and operation of the Proposed Project on a project-specific level (CEQA Guidelines Section 15161). The SEIR analysis will also provide the basis for CEQA compliance for subsequent approvals for the Project, such as any use permits, design review permits, and other discretionary permits issued by the City or any other regulatory agency.

The following discretionary approvals would be obtained for the Project:

- Certification of the SEIR
- Major Project Permit Stages 1-3

- Specific Plan Amendment to the Northeast Roseville Specific Plan
- Development Agreement Amendment

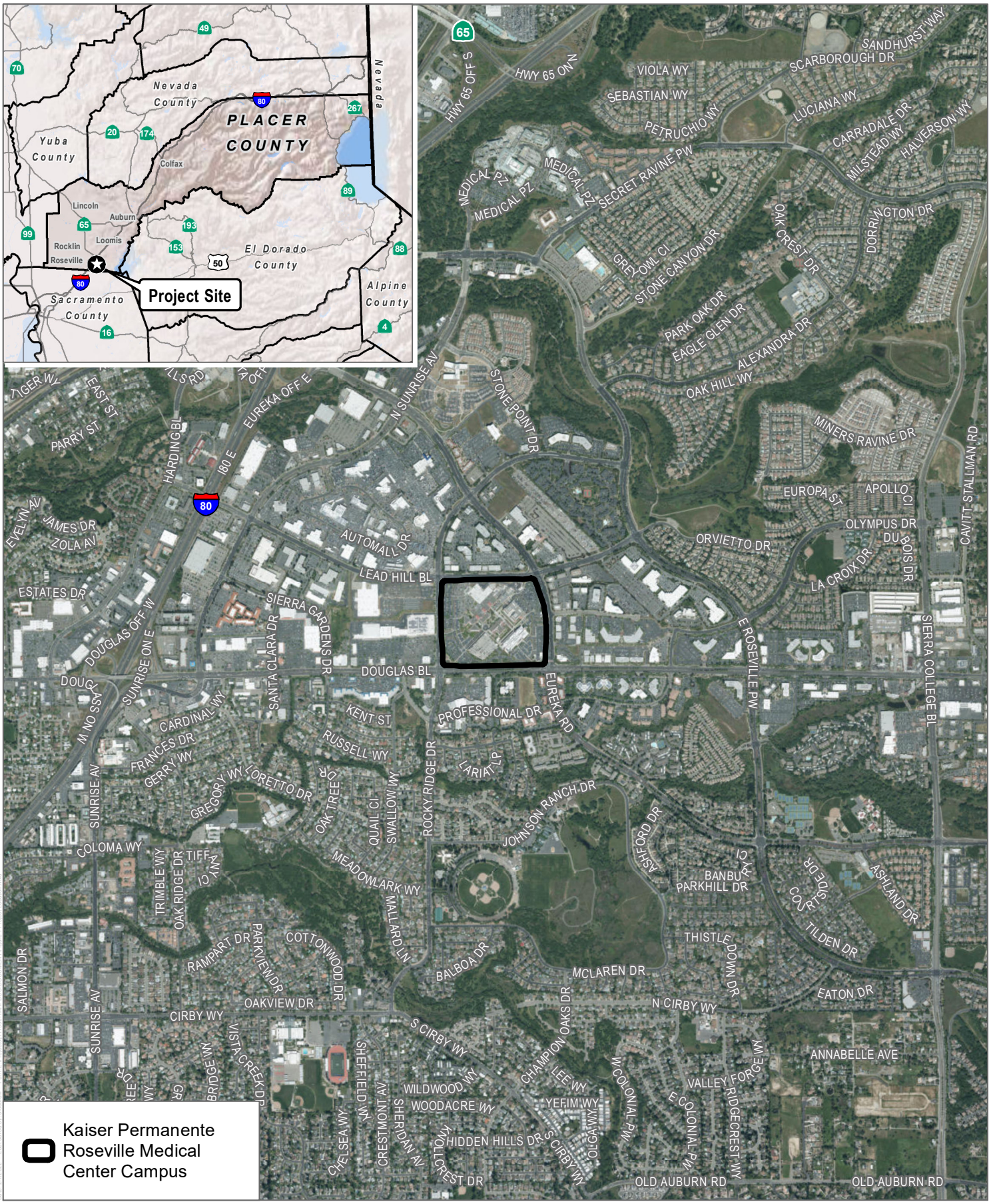
PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE SEIR

The SEIR will address those Project components that were not previously evaluated in the 2004 EIR. It is anticipated that the proposed changes to the approved 2004 Expansion Project would be minor and may not require new mitigation measures. To evaluate potential environmental impacts associated with the proposed land use changes, CEQA Guidelines Section 15163 sets forth the circumstances under which a project may warrant a supplemental (rather than subsequent) EIR. Specifically, a lead agency shall prepare a supplement to an EIR if any of the conditions described in Section 15162 requiring a further EIR are found, but only minor additions or changes would be necessary to make the original EIR adequate. Based on the proposed changes to the approved 2004 Expansion Project, the City has determined a SEIR is the appropriate CEQA document. The SEIR will provide a project-specific environmental analysis to determine if the Proposed Project would result in any significant impacts not adequately addressed in the 2004 EIR and/or if additional mitigation measures beyond those adopted in the EIR's Mitigation Monitoring and Reporting Program would be required to reduce impacts to a less-than-significant level.

Based on a review of the proposed changes to the 2004 Expansion Project, it is anticipated that potential environmental impacts associated with Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Recreation, and Public Services, would not change from the 2004 EIR and the analysis and mitigation measures contained in the Kaiser Permanente Roseville Medical Center Expansion Project EIR are still adequate. The only issue where either new impacts not previously evaluated in the 2004 EIR or the severity of the impact may be more severe would occur in the following: Aesthetics, Air Quality, Greenhouse Gases, Land Use, Public Utilities, and Transportation. Three new issue areas added to the CEQA Guidelines and not previously evaluated in the 2004 EIR include Energy, Tribal Cultural Resources, and Wildfire. All of these issue areas will be evaluated qualitatively in the SEIR Executive Summary and it is anticipated no new impacts would occur.

CUMULATIVE IMPACTS ANALYSIS

As required by CEQA, the SEIR will also evaluate the cumulative impacts of the Proposed Project. As stated in CEQA Section 15065(a)(3), proposed projects should be evaluated to determine whether the project's impacts are "cumulatively considerable," which means that the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects."



SOURCE: City of Roseville 2019

FIGURE 1

Project Location

Kaiser Roseville Medical Center Expansion Project

DUDEK

0 1,000 2,000 Feet

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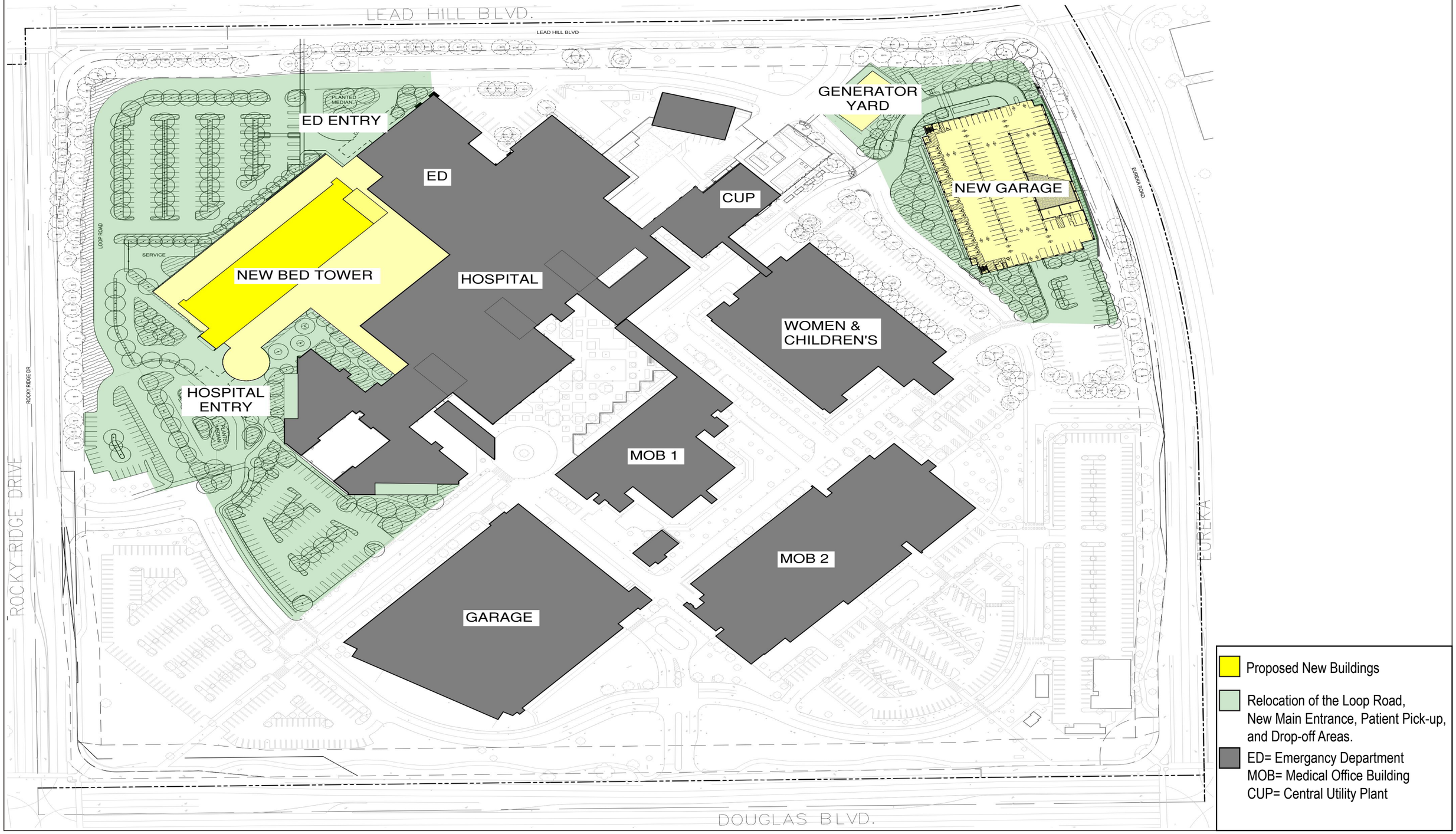

SOURCE: City of Roseville 2019

FIGURE 2

Site Plan

Kaiser Roseville Medical Center Expansion Project

DUDEK

NATIVE AMERICAN HERITAGE COMMISSION

February 28, 2022

Kinarik Shallow, Associate Planner
City of Roseville
311 Vernon Street
Roseville, CA 95678

Re: 2022020590, Kaiser Permanente Roseville Medical Center Inpatient Bed Tower Project, Placer County

Dear Ms. Shallow:

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.

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

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

Placer County
AIR POLLUTION CONTROL DISTRICT

110 Maple Street, Auburn, CA 95603 • (530) 745-2330 • Fax (530) 745-2373 • www.placerair.org

Erik C. White, Air Pollution Control Officer

March 28, 2022

SENT VIA E-MAIL: kshallow@roseville.ca.us

Kinarik Shallow, Associate Planner
City of Roseville, Planning Department
311 Vernon Street
Roseville, CA 95678

SUBJECT: Notice of Preparation of a Supplement to the Kaiser Permanent Roseville Medical Center Expansion Project Environmental Impact Report (SCH#2003062014) for the proposed Inpatient Bed Tower Project

Ms. Shallow;

Thank you for submitting the Notice of Preparation of a Supplement to the Kaiser Permanent Roseville Medical Center Expansion Project Environmental Impact Report (SCH#2003062014) for the proposed Inpatient Bed Tower Project (Project) to the Placer County Air Pollution Control District (District) for review and comment. The District provides the following comments for consideration.

1. The District's CEQA Thresholds of Significance for criteria pollutants and Greenhouse Gas (GHG) are summarized in the tables below:

Criteria Pollutant Thresholds								
Construction Phase			Operational Phase Project-Level			Operational Phase Cumulative-Level		
ROG	NOx	PM_{10}	ROG	NOx	PM_{10}	ROG	NOx	PM_{10}
(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
82	82	82	55	55	82	55	55	82

Greenhouse Gas Thresholds			
Bright-line Threshold 10,000 MT CO2e/yr			
Efficiency Matrix			
Residential		Non-residential	
Urban	Rural	Urban	Rural
(MT CO2e/capita)		(MT CO2e/1,000sf)	
4.5	5.5	26.5	27.3
De Minimis Level 1,100 MT CO2e/yr			

The District recommends applying the District's adopted thresholds to determine the level of significance for the Project's related criteria pollutants and GHG impacts.

2. The District's California Environmental Quality Act (CEQA) Air Quality 2017 Handbook (Handbook) provides recommended analytical approaches and feasible mitigation measures when preparing air quality analyses for land use projects. The Handbook is available on the District's website at http://www.placerair.org/landuseandceqa/ceqaairqualityhandbook. Except where noted below additional detail relating to the following recommended items can be found within the Handbook.

   - The Project is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the District. The SVAB is designated as nonattainment for federal and state ozone (O_3) standards and non-attainment for the federal PM2.5 – 24-hour standard. Within the Air Quality section, the District recommends the discussion include the area designations for the federal and state standards for the SVAB.

- The California Emissions Estimator Model (CalEEMod) is recommended to estimate the Project related air pollutants emissions from construction and operational phases. CalEEMod quantifies criteria pollutant emissions, including greenhouse gases (GHGs) from construction and operation (including vehicle use), as well as GHG emissions from energy production, solid waste handling, vegetation planting and/or removal, and water conveyance. In addition, CalEEMod calculates the benefits from implementing mitigation measures, including GHG mitigation measures, developed and approved by California Air Pollution Control Officers Association. The new CalEEMod version 2022.1 is accessible online at https://www.caleemod.com/.

  The District also requests that copies of all modeling analysis files be provided during the public review and comment period of the environmental documents.

- In the event the air quality analysis demonstrates the potential for the Project to cause or generate significant adverse air quality related impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. Additional mitigation measures can be found in the District's CEQA Handbook within the following related appendices.

  Appendix A. District Rules and Regulations (Construction and Operational)

  Appendix C. Recommended Mitigation Measures (Construction)

  Appendix E. Recommended Mitigation Measures (Operational)

  Appendix F. Mitigation Measures (Greenhouse Gases)

- The District recommends a CALINE 4 modeling analysis for carbon monoxide (CO) concentration be performed and discussed within the environmental document either of the following scenarios is true for any intersection affected by the project traffic, the project should conduct a site-specific CO dispersion modeling analysis to evaluate the potential local CO emission impact at roadway intersections:

- A traffic study for the project indicates that the peak-hour LOS on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity will be degraded from an acceptable LOS (e.g., A, B, C, or D) to an unacceptable LOS (e.g., E or F); or

- A traffic study indicates that the project will substantially worsen an already existing unacceptable peak-hour LOS on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where a delay would increase by 10 seconds or more when project-generated traffic is included.

3. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permits(s) from the District. The applicant, developer, or operator of a project that include generators, boilers, or hot water heaters should contact the District early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower are required to have a PCAPCD permit to operate or a California Air Resources Board portable equipment registration.

4. District Rule 228, Fugitive Dust (PDF), establishes standards to be met by activities generating fugitive dust. When an area to be disturbed is greater than one acre, a dust control plan must be submitted to and approved by the District. The District has developed an application for this purpose, which can be found on the District website: https://placerair.org/FormCenter/Air-Pollution-Control-6/Dust-Control-Form-52 .

Thank you for allowing the District this opportunity to review the project NOP document. Please do not hesitate to contact me at 530.745.2327 or ahobbs@placer.ca.gov if you have any questions.

Sincerely,

Ann Hobbs
Associate Planner
Placer County Air Pollution Control District, Planning & Monitoring Section

29 March 2022

Kinarik Shallow
City of Roseville
311 Vernon Street
Roseville, CA 95678
kshallow@roseville.ca.us

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, KAISER PERMANENTE ROSEVILLE MEDICAL CENTER INPATIENT BED TOWER PROJECT, SCH#2022020590, PLACER COUNTY

Pursuant to the State Clearinghouse's 25 February 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 Kaiser Permanente Roseville Medical Center Inpatient Bed Tower Project, located in Placer 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) 464-4709 or Greg.Hendricks@waterboards.ca.gov.

Greg Hendricks
Environmental Scientist

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

Appendix B

Community Design Guidelines
Applicable to the Proposed Project

Community Design Guidelines

The following Community Design Guidelines are applicable to the proposed Project:

I. Site Design Guidelines

A. Site Planning and Building Siting

OI-1. Buildings should be clustered to defi ne, connect, and activate pedestrian edges and public spaces and to provide convenient access to transit stops.

OI-3. Buildings should be placed on project sites to create a street presence and enhance community character.

- When necessary, setbacks should be used to provide sound attenuation by creating space for the placement of sound barriers.
- Projects with two story buildings should have larger setbacks than those with single story buildings.

OI-4. If a project is proposed in phases, each phase shall be designed to function independently, without reliance on improvements included in subsequent phases.

B. Edge and Boundary Treatment

OI-6. Landscaping, public spaces, art and/or other "gateway" features should be used to defi ne the entryways into the project.

OI-7. Entryway features should reflect the overall architectural identity or character of the development

D. Green Site Design

OI-18. Consistent with the City's Stormwater Treatment Manual, surface water and pollutant runoff should be reduced by maximizing the use of pervious surfaces and vegetative ground cover.

- Use of permeable paving, pavers, turf stone, brick, and decomposed granite is encouraged.
- Use natural topographic features or built swales for site drainage, provide pervious or semi-pervious pavement, etc.

E. Access, Circulation, and Parking

OI-22. Paving material for driveways, drive aisles, and walkways should be consistent with the architectural style of the buildings and should incorporate similar accent elements.

- Stamped and/or colored concrete or other decorative accent is encouraged.

OI-23. Site circulation should allow for and facilitate emergency access to the site and all buildings.

- Speed bumps are strongly discouraged as they impede emergency response.
- Long, straight drives are discouraged to prevent speeding and conflicts with pedestrians.

OI-25. Street and drive aisle widths, throat depths, stacking distances, and parking shall comply with current City standards.

OI-26. Sidewalk corridors in parking lots should have a minimum of five feet of landscaping on at least one side of the walkway or alternating form one side to the other to provide shade and scale for pedestrians.

II. Architectural Guidelines

A. Architectural Design Concept

OI-32. Overall character of the development should be defined through the use of a consistent design concept.

- Building design should be consistent with the defined architectural style and should incorporate the architectural embellishments commonly associated with that style.
- Facades should be designed to include authentic architectural elements.

OI-33. Architectural design concepts of neighboring projects should be considered.

- The project may adopt a consistent or contrasting approach.
- Buildings should be designed to conform to their surroundings with respect to height and scale.
- Repetition and duplication ("copycat effect") of architecture should be avoided.

B. Forming and Massing

OI-34. Variation of wall planes, rooflines, and building form should be considered to create visually engaging designs.

- Architectural elements such as varied roof forms, articulation of the facade, breaks in the roof, walls with texture materials and ornamental details, and landscaping should be incorporated to add visual interest.
- Architectural elements such as fenestrations and recessed planes should be incorporated into façade design. Large areas of flat, blank wall and lack of treatment are strongly discouraged.
- Roof height, pitch, ridgelines, and roof materials should be varied to create visual interest and avoid repetition. Architectural style should be considered when designing the roof plan.

- Stairs and other entry access requirements such as wheelchair ramps and elevators should be integrated into the overall project design

OI-35. Proportional relationship between adjacent buildings and between the building and the street should be maintained.

- Unit/building layout should ensure the gradual transition of building height and mass.
- Pedestrian scaled entry should be a prominent feature of the front elevation.

OI-36. Landscaping and architectural detail at the street level should be used to soften the edge of the building and enhance the pedestrian scale and streetscape.

OI-37. Main building entries should be emphasized through building articulation and form to allow easy identification from the street and parking lot, and convenient access for pedestrians.

- Building entry zones should be clearly defined through the use, or combined use, of elements such as accent paving, accent planting, color pots and bollards.
- Architectural detail such as windows, awnings, trellises, articulation, arcades, landscape planters, and material changes at the street level should be used to soften the edge of the building and enhance pedestrian scale.

OI-38. Setbacks shall comply with the requirements of the Zoning Ordinance and building codes where applicable.

C. Use of Exterior Building Materials and Color

OI-39. Variation in color and materials should be considered to create visually engaging designs.

- High quality and durable materials, such as stone, brick, and cementious siding are encouraged.
- Creative use of plaster and stucco finishes that add visual depth and texture is highly encouraged.
- Creative and appropriate use of color is encouraged.
- Use of color should be consistent with the overall architectural style or theme of the project.
- Variation in exterior treatment of adjacent buildings is encouraged.

OI-40. Architectural treatment should be applied to all elevations of a building and may include elements such as color, materials, or form drawn from the design of the primary frontage.

- Rear and side elevations of buildings facing a street should be given particular emphasis.

- Side and back walls of units/buildings on corners should include treatment on walls facing the street, and should incorporate design features such as wall plane projections and other visual relief, variation in building mass, and window placement.

OI-41. Architectural features that enhance the façade or building form are encouraged.

- Architectural features such as decorative moldings, windows, dormers, and landscaped elements such as lattices that add detail to a façade are encouraged.

OI-42. Columns, wall plane projections, and other visual relief should provide visual depth and shade and shadow interest.

D. Green Building Design

OI-43. Green building design should be considered in the project.

- Natural climate control features such as roofs with larger overhangs and trellises or deciduous trees over south-facing windows are encouraged to reduce energy demand.
- Use of windows for natural light indoors as much as possible is encouraged. Windows should be placed for cross-ventilation and airflow to promote natural cooling.
- Building materials that are less hazardous and/or are made from recycled materials are encouraged.
- Building designs that incorporate opportunities for renewable energy production such as solar panels are encouraged.
- Use of native vegetation is encouraged to reduce water consumptions for landscaping.
- Use of recycled water is encouraged for landscaping.

III. Public Space Guidelines

A. Streetscape Design

OI-44. Safe and comfortable pedestrian environments should be provided in the project.

- Physical separation from streets and drive aisles should be provided through landscaping to encourage walking.
- Pedestrian amenities such as appropriate signage, street furniture, landscaping and pedestrian-scale lighting should be provided.
- Wider sidewalks should be provided to allow for two persons to walk comfortably side-by-side.

OI-45. Streetscape design should include the following elements:

- Primary street trees that provide shade for pedestrians, soften and frame the street, and define the public space.
- Secondary trees that complement and support the primary trees in form and function.
- Accent trees that are used to define entrances, add variety in form and color, or highlighting other focal points of the street.
- Primary, secondary and accent shrubs which are used to form the understory and further define entrances and provide screening of parked cars where necessary
- Groundplane treatment, groundcovers and seasonal color plantings.
- Hardscape elements such as pavers, planters, bus stops, sidewalks, benches, bollards, bike paths, site access paths, and street lights.

OI 47. Utilities and mechanical equipment should be screened from public view.

- Ground-mounted HVAC units should be located away from activity areas and screened from public view through landscaping and/or screen walls.
- Public utility infrastructure and other utility components should be oriented away from public view to the extent possible and screened with evergreen shrubs to the extent allowed by the utilities.
- Ground or wall mounted equipment should be located out of public view to the extent possible and screened or placed in an enclosure to the extent allowed by the utility companies.
- Screening for equipment shall be integrated into the building and roof design and use compatible materials, colors and forms. Wood lattice or fence like coverings are inappropriate for screening and are discouraged.
- Roof mounted equipment, including but not limited to air conditioners, fans, vents, antennas, and microwave dishes shall be setback from the roof edge, or placed behind a parapet or in a well so that they are not visible to motorists or pedestrians on the adjacent streets.

OI-49. A combination of landscaping, berming, and screen walls to a height of three feet should be used to screen views of parked cars adjacent to the streetscape.

B. Landscaping

OI-50. Landscaping shall be used extensively throughout the project to achieve multiple objectives. Objectives to be achieved through landscaping may include:

- Adding texture to walls and other vertical surfaces;
- Screening undesirable views;
- Strengthening the pedestrian scale;
- Buffering pedestrian walkways from the street and buildings;
- Providing shade in public spaces and parking lots;

- Assisting in neighborhood way finding;
- Softening transitions between horizontal and vertical planes;
- Providing a visual and noise buffer; and
- Relieving the visual appearance of large expanses of hard surfaces.

OI-51. Layered landscaping and a mix of deciduous and evergreen trees shall be incorporated in the landscape design. The plant palette should emphasize massing and form rather than individual or small groupings of shrubs and trees.

OI-52. Tree placement should provide maximum shading of sidewalks, and outdoor public spaces.

OI-53. Trees should shade at least 50% of the paved parking areas as measured at 15 year maturity based on the tree species and mid summer sun angle conditions. The shade values for various tree species are located in the specific plan landscape guidelines. Shade calculations shall be made in accordance with the Parking Lot Shade Diagram in Appendix C.

OI-54. Native planting or compatible species of drought-tolerant plants should be used as much as possible to reduce water consumption.

- Use of turf is not permitted in median strips or within the protected zone of any native oak tree, or as provided in the Roseville Water Efficient Landscape Requirements.
- Turf should be limited to accent areas, activity areas, or in parkway areas between sidewalks and street curbs.
- Plants should be grouped according to their water needs and irrigated separately from other groupings with dissimilar water needs.

OI-55. Visual surveillance of common open space, parking areas, or building entries should not be obscured through landscaping.

OI-56. Landscape designs should consider adjacent site landscaping, either existing or planned, and enhance rather than duplicate the landscaping effort.

OI-57. Plant materials shall be selected and located to avoid conflicts with the underground or above ground utilities.

OI-58. Trees and shrubs planted at all intersections and driveways shall be selected and located to maintain safe sight line distances per the City's Clear Vision Triangle as defined in the Zoning Ordinance.

OI-59. Plant selection should consider site geology and soil conditions and provide suitable mitigation to ensure successful establishment of the introduced landscaping.

OI-60. All required landscaping improvements shall be continually preserved and maintained to professional maintenance industry standards.

- Plant materials that have died or are in a visible state of decline shall be replaced to meet the requirements of the original landscape plan approval.
- All proposed tree work on native oak trees that is considered to be a regulated activity under the Tree Preservation Ordinance shall require approval of a tree permit.

OI-61. Tree selection and placement should allow for sufficient root space adjacent to paved surfaces. The following minimum planter widths (measured inside curbs) should be provided:

- Eight feet for large canopy trees
- Six to eight feet for medium to large canopy trees
- Six feet for medium to small canopy trees
- Four feet for small canopy trees

OI-62. Planters shall be protected from vehicles by use of raised curbs or wheel stops.

OI-63. Trees should be a minimum of fifteen gallon size. It is recommended that larger sized trees be incorporated for accent or activity areas.

OI-64. Shrubs should be a minimum of one gallon in size; however, a mix of one gallon and five gallon shrubs is encouraged. Screen plantings may require five gallon minimum sizes in order to provide immediate effectiveness. Shrub ground covers may be specified in either liner or one gallon sizes.

OI-65. Landscape plans should be prepared by a licensed landscape architect and shall be prepared in accordance with the Water Efficient Landscape Requirements.

OI-66. Slopes for landscaped areas should not exceed three to one, and the minimum slope shall be two percent.

OI-68. The top and toe of slopes within landscaped areas shall be setback a minimum of two feet from fences, walls, property lines, street curbs, pedestrian/bike paths or other hardscape surfaces in order to prevent drainage across these surfaces.

C. Plazas & Outdoor Spaces

OI-69. Active use of outdoor spaces should be encouraged.

- Plazas or other outdoor activity spaces used for sitting, eating, strolling, and gathering should be designed into the project.
- Where multiple buildings are proposed, buildings should be clustered to create pedestrian plazas and gathering spaces.

- Plaza design should emphasize the active nature of these spaces and incorporate some combination of accent materials, site furniture, shade structures, accent lighting, interesting colors, textures and forms, and art, graphics or other focal elements.
- Plaza design should provide amenities for varying light and climate conditions, protection from sun and wind, moveable furniture, climate control elements, children's play areas, and performance areas.
- Furniture should be selected not only for its functional and aesthetic qualities but also focus on the quality of materials and finishes that provide long term durability and resistance to vandalism.
- The relationship between indoor and outdoor spaces and uses should be considered in plaza and outdoor space designs.

E. Lighting

OI-71. Pedestrian-scale lighting should be incorporated in outdoor areas such as pedestrian walkways, plazas, play lots and parking areas.

OI-72. Pedestrian-scale lighting should be integrated into building and landscape design. Light fixtures should be compatible with the architectural style, materials, color, and scale of the project.

OI-73. Safety and security in the project and its immediate surroundings shall be enhanced through lighting design.

OI-74. Energy efficiency and overall effect should be considered for lighting design.

OI-75. Exterior lighting should reinforce the architectural features and blend into the landscape. Special lighting may be used to highlight unique design elements or art features

OI-76. Main entries / storefronts should have the highest level of illumination followed by pedestrian walking areas.

OI-77. Lighting that is less than 10 feet in height is considered pedestrian scale.

OI-78. Lighting sources shall have cut off lenses and should be located to avoid light spillage and glare on adjacent properties and in private spaces.

OI-79. Project addresses shall be clearly displayed and illuminated for easy identification by emergency response personnel.

OI-80. Pedestrian-scale light fixtures shall be of durable and vandal resistant materials and construction.

OI-81. Streets, entry drives, drive aisles, and parking areas shall have a minimum illumination level of 1.0 footcandle at the pavement surface.

OI-82. Pole mounted lighting should be spaced for maximum energy efficiency and be no taller than 25 feet for office projects and 35 feet for industrial projects.

OI-83. Pedestrian walks should have minimum maintained illumination levels of 0.5 footcandles at the walking surface.

G. Signage

OI-87. Thoughtfully integrated design themes and styles for project signage that conforms to the Roseville Sign Ordinance are highly encouraged.

OI-88. Sign type and locations should be consistent throughout the project and the sign materials and graphics should complement the project design.

OI-89. Building and site addressing shall be illuminated and comply with applicable City addressing policies.

Appendix C

Kaiser Roseville Medical Center Inpatient Bed Tower – Air Quality and GHG Calculations

CalEEMod Version: CalEEMod.2020.4.0

Date: 4/24/2022 4:19 PM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Kaiser Bed Tower Project - Bed Tower

Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	278.00	1000sqft	8.77	278,000.00	0
User Defined Industrial	1.00	User Defined Unit	0.13	5,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Bed Tower Project. Placer County.

Land Use - Project includes 278,000 SF bed tower and 5,600 SF generator yard.

Construction Phase - Project construction would begin January 2023, with buildout in February 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated construction equipment per applicant.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per information from applicant.

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Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed. Included 3 compactors.

Trips and VMT - Default trips assumed. Added vendor truck to demolition, grading, and paving for water truck.

Demolition - 4,055 tons of pavement removed.

Grading - Cut: 23,498 CY, Fill: 9,836 CY.

Vehicle Trips - Updated trip rates per traffic analysis.

Construction Off-road Equipment Mitigation - Water twice daily. Use of Tier 4 final equipment.

Stationary Sources - Emergency Generators and Fire Pumps - Two 2 MW emergency generators.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	0.00	15,654.00
tblAreaCoating	Area_Parking	0	15654
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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tblConstructionPhase	NumDays	10.00	168.00
tblConstructionPhase	NumDays	20.00	245.00
tblConstructionPhase	NumDays	20.00	893.00
tblConstructionPhase	NumDays	230.00	784.00
tblConstructionPhase	NumDays	20.00	410.00
tblGrading	AcresOfGrading	490.00	768.00
tblGrading	AcresOfGrading	252.00	279.00
tblGrading	MaterialExported	0.00	13,662.00
tblLandUse	LandUseSquareFeet	0.00	5,600.00
tblLandUse	LotAcreage	6.38	8.77
tblLandUse	LotAcreage	0.00	0.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	46.00	89.00
tblTripsAndVMT	WorkerTripNumber	28.00	15.00
tblTripsAndVMT	WorkerTripNumber	25.00	18.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	15.00
tblTripsAndVMT	WorkerTripNumber	91.00	201.00

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tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblVehicleTrips	ST_TR	7.72	8.54
tblVehicleTrips	SU_TR	6.77	7.49
tblVehicleTrips	WD_TR	10.72	11.86

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6225	6.0792	6.2148	0.0127	2.1761	0.2658	2.4419	0.9168	0.2448	1.1616	0.0000	1,121.3263	1,121.3263	0.3313	0.0105	1,132.7477
2024	0.3458	3.0866	3.5869	0.0102	0.6697	0.1142	0.7839	0.1153	0.1053	0.2206	0.0000	919.9857	919.9857	0.1888	0.0344	934.9552
2025	1.1966	2.8936	3.6464	0.0109	0.3393	0.1047	0.4439	0.0921	0.0970	0.1892	0.0000	980.2317	980.2317	0.1797	0.0384	996.1800
2026	0.8017	2.5711	2.8651	9.4800e-003	0.3167	0.0898	0.4065	0.0861	0.0831	0.1692	0.0000	855.9171	855.9171	0.1516	0.0368	870.6744
2027	0.0337	0.3194	0.2478	1.1300e-003	0.0443	0.0102	0.0544	0.0121	9.3600e-003	0.0214	0.0000	102.9206	102.9206	0.0162	5.4700e-003	104.9568
Maximum	**1.1966**	**6.0792**	**6.2148**	**0.0127**	**2.1761**	**0.2658**	**2.4419**	**0.9168**	**0.2448**	**1.1616**	**0.0000**	**1,121.3263**	**1,121.3263**	**0.3313**	**0.0384**	**1,132.7477**

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Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1708	0.8466	7.2665	0.0127	1.0118	0.0234	1.0352	0.4213	0.0233	0.4446	0.0000	1,121.3251	1,121.3251	0.3313	0.0105	1,132.7464
2024	0.1574	0.9103	4.5107	0.0102	0.4453	0.0162	0.4615	0.0911	0.0160	0.1070	0.0000	919.9850	919.9850	0.1888	0.0344	934.9545
2025	1.0367	1.0892	4.6082	0.0109	0.3393	0.0223	0.3616	0.0921	0.0220	0.1142	0.0000	980.2311	980.2311	0.1797	0.0384	996.1793
2026	0.6612	0.9513	3.7067	9.4800e-003	0.3167	0.0174	0.3341	0.0861	0.0172	0.1033	0.0000	855.9165	855.9165	0.1516	0.0368	870.6738
2027	0.0170	0.1156	0.3470	1.1300e-003	0.0443	1.5200e-003	0.0458	0.0121	1.4900e-003	0.0136	0.0000	102.9205	102.9205	0.0162	5.4700e-003	104.9567
Maximum	**1.0367**	**1.0892**	**7.2665**	**0.0127**	**1.0118**	**0.0234**	**1.0352**	**0.4213**	**0.0233**	**0.4446**	**0.0000**	**1,121.3251**	**1,121.3251**	**0.3313**	**0.0384**	**1,132.7464**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**31.91**	**73.82**	**-23.42**	**0.00**	**39.16**	**86.19**	**45.82**	**42.52**	**85.18**	**55.58**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2429	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9900e-003	4.9900e-003	1.0000e-005	0.0000	5.3100e-003
Energy	0.1257	1.1423	0.9595	6.8500e-003		0.0868	0.0868		0.0868	0.0868	0.0000	1,629.8199	1,629.8199	0.0863	0.0304	1,641.0295
Mobile	1.3673	1.8721	12.5093	0.0254	2.7711	0.0215	2.7926	0.7423	0.0202	0.7624	0.0000	2,344.5001	2,344.5001	0.1498	0.1276	2,386.2696
Stationary	0.0528	0.2362	0.1347	2.5000e-004		7.7700e-003	7.7700e-003		7.7700e-003	7.7700e-003	0.0000	24.5112	24.5112	3.4400e-003	0.0000	24.5971
Waste						0.0000	0.0000		0.0000	0.0000	609.4601	0.0000	609.4601	36.0181	0.0000	1,509.9115
Water						0.0000	0.0000		0.0000	0.0000	11.0670	19.6160	30.6830	1.1399	0.0272	67.2922
Total	**2.7887**	**3.2505**	**13.6060**	**0.0325**	**2.7711**	**0.1161**	**2.8872**	**0.7423**	**0.1148**	**0.8570**	**620.5270**	**4,018.4522**	**4,638.9792**	**37.3975**	**0.1852**	**5,629.1052**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2429	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9900e-003	4.9900e-003	1.0000e-005	0.0000	5.3100e-003
Energy	0.1257	1.1423	0.9595	6.8500e-003		0.0868	0.0868		0.0868	0.0868	0.0000	1,629.8199	1,629.8199	0.0863	0.0304	1,641.0295
Mobile	1.3673	1.8721	12.5093	0.0254	2.7711	0.0215	2.7926	0.7423	0.0202	0.7624	0.0000	2,344.5001	2,344.5001	0.1498	0.1276	2,386.2696
Stationary	0.0528	0.2362	0.1347	2.5000e-004		7.7700e-003	7.7700e-003		7.7700e-003	7.7700e-003	0.0000	24.5112	24.5112	3.4400e-003	0.0000	24.5971
Waste						0.0000	0.0000		0.0000	0.0000	609.4601	0.0000	609.4601	36.0181	0.0000	1,509.9115
Water						0.0000	0.0000		0.0000	0.0000	11.0670	19.6160	30.6830	1.1399	0.0272	67.2922
Total	**2.7887**	**3.2505**	**13.6060**	**0.0325**	**2.7711**	**0.1161**	**2.8872**	**0.7423**	**0.1148**	**0.8570**	**620.5270**	**4,018.4522**	**4,638.9792**	**37.3975**	**0.1852**	**5,629.1052**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	2/21/2023	10/12/2023	5	168	
3	Grading	Grading	3/21/2023	2/26/2024	5	245	
4	Paving	Paving	3/21/2023	8/20/2026	5	893	
5	Building Construction	Building Construction	2/27/2024	2/27/2027	5	784	
6	Architectural Coating	Architectural Coating	1/7/2025	8/3/2026	5	410	

Acres of Grading (Site Preparation Phase): 279

Acres of Grading (Grading Phase): 768

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 425,400; Non-Residential Outdoor: 141,800; Striped Parking Area: 15,654

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Cranes	2	8.00	231	0.29
Demolition	Excavators	6	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Paving Equipment	3	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

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Grading	Excavators	3	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Scrapers	2	8.00	367	0.48
Paving	Excavators	3	8.00	158	0.38
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	3	8.00	231	0.29
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	15.00	2.00	401.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	10	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	20.00	2.00	1,708.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	15.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	201.00	89.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0434	0.0000	0.0434	6.5700e-003	0.0000	6.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0342	0.3322	0.3146	6.9000e-004		0.0148	0.0148		0.0136	0.0136	0.0000	60.6696	60.6696	0.0196	0.0000	61.1601
Total	**0.0342**	**0.3322**	**0.3146**	**6.9000e-004**	**0.0434**	**0.0148**	**0.0582**	**6.5700e-003**	**0.0136**	**0.0202**	**0.0000**	**60.6696**	**60.6696**	**0.0196**	**0.0000**	**61.1601**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-004	0.0273	6.0500e-003	1.2000e-004	3.3800e-003	2.4000e-004	3.6200e-003	9.3000e-004	2.3000e-004	1.1600e-003	0.0000	11.7311	11.7311	2.0000e-005	1.8400e-003	12.2810
Vendor	2.0000e-005	9.2000e-004	2.9000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3884	0.3884	0.0000	6.0000e-005	0.4059
Worker	3.9000e-004	2.6000e-004	3.4000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9187	0.9187	3.0000e-005	3.0000e-005	0.9270
Total	**9.0000e-004**	**0.0285**	**9.7400e-003**	**1.3000e-004**	**4.6900e-003**	**2.6000e-004**	**4.9400e-003**	**1.2800e-003**	**2.5000e-004**	**1.5200e-003**	**0.0000**	**13.0382**	**13.0382**	**5.0000e-005**	**1.9300e-003**	**13.6139**

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9600e-003	0.0000	2.9600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.4900e-003	0.0368	0.4066	6.9000e-004		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	60.6695	60.6695	0.0196	0.0000	61.1601
Total	**8.4900e-003**	**0.0368**	**0.4066**	**6.9000e-004**	**0.0195**	**1.1300e-003**	**0.0207**	**2.9600e-003**	**1.1300e-003**	**4.0900e-003**	**0.0000**	**60.6695**	**60.6695**	**0.0196**	**0.0000**	**61.1601**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-004	0.0273	6.0500e-003	1.2000e-004	3.3800e-003	2.4000e-004	3.6200e-003	9.3000e-004	2.3000e-004	1.1600e-003	0.0000	11.7311	11.7311	2.0000e-005	1.8400e-003	12.2810
Vendor	2.0000e-005	9.2000e-004	2.9000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3884	0.3884	0.0000	6.0000e-005	0.4059
Worker	3.9000e-004	2.6000e-004	3.4000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9187	0.9187	3.0000e-005	3.0000e-005	0.9270
Total	**9.0000e-004**	**0.0285**	**9.7400e-003**	**1.3000e-004**	**4.6900e-003**	**2.6000e-004**	**4.9400e-003**	**1.2800e-003**	**2.5000e-004**	**1.5200e-003**	**0.0000**	**13.0382**	**13.0382**	**5.0000e-005**	**1.9300e-003**	**13.6139**

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3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6655	0.0000	1.6655	0.8502	0.0000	0.8502	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2664	2.7160	2.1768	4.2200e-003		0.1260	0.1260		0.1159	0.1159	0.0000	371.1652	371.1652	0.1200	0.0000	374.1662
Total	**0.2664**	**2.7160**	**2.1768**	**4.2200e-003**	**1.6655**	**0.1260**	**1.7915**	**0.8502**	**0.1159**	**0.9661**	**0.0000**	**371.1652**	**371.1652**	**0.1200**	**0.0000**	**374.1662**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-003	2.6200e-003	0.0343	1.0000e-004	0.0119	6.0000e-005	0.0119	3.1600e-003	5.0000e-005	3.2100e-003	0.0000	9.2602	9.2602	2.7000e-004	2.6000e-004	9.3439
Total	**3.9000e-003**	**2.6200e-003**	**0.0343**	**1.0000e-004**	**0.0119**	**6.0000e-005**	**0.0119**	**3.1600e-003**	**5.0000e-005**	**3.2100e-003**	**0.0000**	**9.2602**	**9.2602**	**2.7000e-004**	**2.6000e-004**	**9.3439**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7495	0.0000	0.7495	0.3826	0.0000	0.3826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0518	0.2244	2.5345	4.2200e-003		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003	0.0000	371.1647	371.1647	0.1200	0.0000	374.1658
Total	**0.0518**	**0.2244**	**2.5345**	**4.2200e-003**	**0.7495**	**6.9000e-003**	**0.7564**	**0.3826**	**6.9000e-003**	**0.3895**	**0.0000**	**371.1647**	**371.1647**	**0.1200**	**0.0000**	**374.1658**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-003	2.6200e-003	0.0343	1.0000e-004	0.0119	6.0000e-005	0.0119	3.1600e-003	5.0000e-005	3.2100e-003	0.0000	9.2602	9.2602	2.7000e-004	2.6000e-004	9.3439
Total	**3.9000e-003**	**2.6200e-003**	**0.0343**	**1.0000e-004**	**0.0119**	**6.0000e-005**	**0.0119**	**3.1600e-003**	**5.0000e-005**	**3.2100e-003**	**0.0000**	**9.2602**	**9.2602**	**2.7000e-004**	**2.6000e-004**	**9.3439**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4080	0.0000	0.4080	0.0441	0.0000	0.0441	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2264	2.2150	2.2918	4.7800e-003		0.0915	0.0915		0.0843	0.0843	0.0000	417.2799	417.2799	0.1336	0.0000	420.6188
Total	**0.2264**	**2.2150**	**2.2918**	**4.7800e-003**	**0.4080**	**0.0915**	**0.4995**	**0.0441**	**0.0843**	**0.1284**	**0.0000**	**417.2799**	**417.2799**	**0.1336**	**0.0000**	**420.6188**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7500e-003	0.0969	0.0215	4.3000e-004	0.0120	8.5000e-004	0.0128	3.3000e-003	8.1000e-004	4.1100e-003	0.0000	41.6051	41.6051	7.0000e-005	6.5400e-003	43.5554
Vendor	2.3000e-004	9.4200e-003	2.9900e-003	4.0000e-005	1.3300e-003	6.0000e-005	1.3900e-003	3.9000e-004	5.0000e-005	4.4000e-004	0.0000	3.9617	3.9617	1.0000e-005	6.0000e-004	4.1405
Worker	5.2700e-003	3.5300e-003	0.0463	1.4000e-004	0.0160	8.0000e-005	0.0161	4.2600e-003	7.0000e-005	4.3400e-003	0.0000	12.4940	12.4940	3.7000e-004	3.5000e-004	12.6069
Total	**7.2500e-003**	**0.1099**	**0.0708**	**6.1000e-004**	**0.0293**	**9.9000e-004**	**0.0303**	**7.9500e-003**	**9.3000e-004**	**8.8900e-003**	**0.0000**	**58.0608**	**58.0608**	**4.5000e-004**	**7.4900e-003**	**60.3028**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1836	0.0000	0.1836	0.0198	0.0000	0.0198	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0657	0.3003	2.6362	4.7800e-003		9.6600e-003	9.6600e-003		9.6600e-003	9.6600e-003	0.0000	417.2794	417.2794	0.1336	0.0000	420.6183
Total	**0.0657**	**0.3003**	**2.6362**	**4.7800e-003**	**0.1836**	**9.6600e-003**	**0.1933**	**0.0198**	**9.6600e-003**	**0.0295**	**0.0000**	**417.2794**	**417.2794**	**0.1336**	**0.0000**	**420.6183**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7500e-003	0.0969	0.0215	4.3000e-004	0.0120	8.5000e-004	0.0128	3.3000e-003	8.1000e-004	4.1100e-003	0.0000	41.6051	41.6051	7.0000e-005	6.5400e-003	43.5554
Vendor	2.3000e-004	9.4200e-003	2.9900e-003	4.0000e-005	1.3300e-003	6.0000e-005	1.3900e-003	3.9000e-004	5.0000e-005	4.4000e-004	0.0000	3.9617	3.9617	1.0000e-005	6.0000e-004	4.1405
Worker	5.2700e-003	3.5300e-003	0.0463	1.4000e-004	0.0160	8.0000e-005	0.0161	4.2600e-003	7.0000e-005	4.3400e-003	0.0000	12.4940	12.4940	3.7000e-004	3.5000e-004	12.6069
Total	**7.2500e-003**	**0.1099**	**0.0708**	**6.1000e-004**	**0.0293**	**9.9000e-004**	**0.0303**	**7.9500e-003**	**9.3000e-004**	**8.8900e-003**	**0.0000**	**58.0608**	**58.0608**	**4.5000e-004**	**7.4900e-003**	**60.3028**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4080	0.0000	0.4080	0.0441	0.0000	0.0441	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0439	0.4121	0.4541	9.6000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	83.8357	83.8357	0.0268	0.0000	84.5065
Total	**0.0439**	**0.4121**	**0.4541**	**9.6000e-004**	**0.4080**	**0.0171**	**0.4251**	**0.0441**	**0.0158**	**0.0599**	**0.0000**	**83.8357**	**83.8357**	**0.0268**	**0.0000**	**84.5065**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5000e-004	0.0193	4.3200e-003	9.0000e-005	2.4100e-003	1.7000e-004	2.5800e-003	6.6000e-004	1.6000e-004	8.3000e-004	0.0000	8.1971	8.1971	1.0000e-005	1.2900e-003	8.5814
Vendor	5.0000e-005	1.8800e-003	5.9000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7805	0.7805	0.0000	1.2000e-004	0.8157
Worker	9.9000e-004	6.3000e-004	8.6900e-003	3.0000e-005	3.2200e-003	2.0000e-005	3.2300e-003	8.6000e-004	1.0000e-005	8.7000e-004	0.0000	2.4286	2.4286	7.0000e-005	7.0000e-005	2.4497
Total	**1.3900e-003**	**0.0218**	**0.0136**	**1.3000e-004**	**5.9000e-003**	**2.0000e-004**	**6.0900e-003**	**1.6000e-003**	**1.8000e-004**	**1.7900e-003**	**0.0000**	**11.4062**	**11.4062**	**8.0000e-005**	**1.4800e-003**	**11.8468**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1836	0.0000	0.1836	0.0198	0.0000	0.0198	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.0604	0.5298	9.6000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	83.8356	83.8356	0.0268	0.0000	84.5064
Total	**0.0132**	**0.0604**	**0.5298**	**9.6000e-004**	**0.1836**	**1.9400e-003**	**0.1855**	**0.0198**	**1.9400e-003**	**0.0218**	**0.0000**	**83.8356**	**83.8356**	**0.0268**	**0.0000**	**84.5064**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5000e-004	0.0193	4.3200e-003	9.0000e-005	2.4100e-003	1.7000e-004	2.5800e-003	6.6000e-004	1.6000e-004	8.3000e-004	0.0000	8.1971	8.1971	1.0000e-005	1.2900e-003	8.5814
Vendor	5.0000e-005	1.8800e-003	5.9000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7805	0.7805	0.0000	1.2000e-004	0.8157
Worker	9.9000e-004	6.3000e-004	8.6900e-003	3.0000e-005	3.2200e-003	2.0000e-005	3.2300e-003	8.6000e-004	1.0000e-005	8.7000e-004	0.0000	2.4286	2.4286	7.0000e-005	7.0000e-005	2.4497
Total	**1.3900e-003**	**0.0218**	**0.0136**	**1.3000e-004**	**5.9000e-003**	**2.0000e-004**	**6.0900e-003**	**1.6000e-003**	**1.8000e-004**	**1.7900e-003**	**0.0000**	**11.4062**	**11.4062**	**8.0000e-005**	**1.4800e-003**	**11.8468**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0792	0.6630	1.2791	2.0500e-003		0.0321	0.0321		0.0297	0.0297	0.0000	178.5202	178.5202	0.0570	0.0000	179.9461
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0792**	**0.6630**	**1.2791**	**2.0500e-003**		**0.0321**	**0.0321**		**0.0297**	**0.0297**	**0.0000**	**178.5202**	**178.5202**	**0.0570**	**0.0000**	**179.9461**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	9.4200e-003	2.9900e-003	4.0000e-005	1.3300e-003	6.0000e-005	1.3900e-003	3.9000e-004	5.0000e-005	4.4000e-004	0.0000	3.9617	3.9617	1.0000e-005	6.0000e-004	4.1405
Worker	3.9500e-003	2.6500e-003	0.0347	1.0000e-004	0.0120	6.0000e-005	0.0121	3.2000e-003	6.0000e-005	3.2500e-003	0.0000	9.3705	9.3705	2.8000e-004	2.6000e-004	9.4552
Total	**4.1800e-003**	**0.0121**	**0.0377**	**1.4000e-004**	**0.0133**	**1.2000e-004**	**0.0135**	**3.5900e-003**	**1.1000e-004**	**3.6900e-003**	**0.0000**	**13.3322**	**13.3322**	**2.9000e-004**	**8.6000e-004**	**13.5957**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0287	0.1321	1.5367	2.0500e-003		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	178.5200	178.5200	0.0570	0.0000	179.9459
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0287**	**0.1321**	**1.5367**	**2.0500e-003**		**4.2700e-003**	**4.2700e-003**		**4.2700e-003**	**4.2700e-003**	**0.0000**	**178.5200**	**178.5200**	**0.0570**	**0.0000**	**179.9459**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	9.4200e-003	2.9900e-003	4.0000e-005	1.3300e-003	6.0000e-005	1.3900e-003	3.9000e-004	5.0000e-005	4.4000e-004	0.0000	3.9617	3.9617	1.0000e-005	6.0000e-004	4.1405
Worker	3.9500e-003	2.6500e-003	0.0347	1.0000e-004	0.0120	6.0000e-005	0.0121	3.2000e-003	6.0000e-005	3.2500e-003	0.0000	9.3705	9.3705	2.8000e-004	2.6000e-004	9.4552
Total	**4.1800e-003**	**0.0121**	**0.0377**	**1.4000e-004**	**0.0133**	**1.2000e-004**	**0.0135**	**3.5900e-003**	**1.1000e-004**	**3.6900e-003**	**0.0000**	**13.3322**	**13.3322**	**2.9000e-004**	**8.6000e-004**	**13.5957**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0977	0.7802	1.6474	2.6300e-003		0.0379	0.0379		0.0350	0.0350	0.0000	229.3328	229.3328	0.0733	0.0000	231.1645
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0977**	**0.7802**	**1.6474**	**2.6300e-003**		**0.0379**	**0.0379**		**0.0350**	**0.0350**	**0.0000**	**229.3328**	**229.3328**	**0.0733**	**0.0000**	**231.1645**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-004	0.0120	3.7800e-003	5.0000e-005	1.7100e-003	7.0000e-005	1.7800e-003	5.0000e-004	7.0000e-005	5.6000e-004	0.0000	4.9876	4.9876	1.0000e-005	7.5000e-004	5.2127
Worker	4.7300e-003	3.0400e-003	0.0417	1.3000e-004	0.0154	7.0000e-005	0.0155	4.1100e-003	7.0000e-005	4.1700e-003	0.0000	11.6393	11.6393	3.2000e-004	3.1000e-004	11.7407
Total	**5.0300e-003**	**0.0151**	**0.0454**	**1.8000e-004**	**0.0171**	**1.4000e-004**	**0.0173**	**4.6100e-003**	**1.4000e-004**	**4.7300e-003**	**0.0000**	**16.6268**	**16.6268**	**3.3000e-004**	**1.0600e-003**	**16.9534**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0368	0.1697	1.9736	2.6300e-003		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	229.3325	229.3325	0.0733	0.0000	231.1643
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0368**	**0.1697**	**1.9736**	**2.6300e-003**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**229.3325**	**229.3325**	**0.0733**	**0.0000**	**231.1643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-004	0.0120	3.7800e-003	5.0000e-005	1.7100e-003	7.0000e-005	1.7800e-003	5.0000e-004	7.0000e-005	5.6000e-004	0.0000	4.9876	4.9876	1.0000e-005	7.5000e-004	5.2127
Worker	4.7300e-003	3.0400e-003	0.0417	1.3000e-004	0.0154	7.0000e-005	0.0155	4.1100e-003	7.0000e-005	4.1700e-003	0.0000	11.6393	11.6393	3.2000e-004	3.1000e-004	11.7407
Total	**5.0300e-003**	**0.0151**	**0.0454**	**1.8000e-004**	**0.0171**	**1.4000e-004**	**0.0173**	**4.6100e-003**	**1.4000e-004**	**4.7300e-003**	**0.0000**	**16.6268**	**16.6268**	**3.3000e-004**	**1.0600e-003**	**16.9534**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0898	0.6761	1.6358	2.6200e-003		0.0329	0.0329		0.0304	0.0304	0.0000	228.4656	228.4656	0.0730	0.0000	230.2905
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0898**	**0.6761**	**1.6358**	**2.6200e-003**		**0.0329**	**0.0329**		**0.0304**	**0.0304**	**0.0000**	**228.4656**	**228.4656**	**0.0730**	**0.0000**	**230.2905**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	0.0119	3.7200e-003	5.0000e-005	1.7000e-003	7.0000e-005	1.7800e-003	4.9000e-004	7.0000e-005	5.6000e-004	0.0000	4.8616	4.8616	1.0000e-005	7.4000e-004	5.0810
Worker	4.4200e-003	2.7300e-003	0.0390	1.2000e-004	0.0154	7.0000e-005	0.0154	4.0900e-003	6.0000e-005	4.1600e-003	0.0000	11.2000	11.2000	2.9000e-004	2.9000e-004	11.2946
Total	**4.7100e-003**	**0.0146**	**0.0427**	**1.7000e-004**	**0.0171**	**1.4000e-004**	**0.0172**	**4.5800e-003**	**1.3000e-004**	**4.7200e-003**	**0.0000**	**16.0616**	**16.0616**	**3.0000e-004**	**1.0300e-003**	**16.3757**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0367	0.1690	1.9661	2.6200e-003		5.4700e-003	5.4700e-003		5.4700e-003	5.4700e-003	0.0000	228.4654	228.4654	0.0730	0.0000	230.2902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0367**	**0.1690**	**1.9661**	**2.6200e-003**		**5.4700e-003**	**5.4700e-003**		**5.4700e-003**	**5.4700e-003**	**0.0000**	**228.4654**	**228.4654**	**0.0730**	**0.0000**	**230.2902**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	0.0119	3.7200e-003	5.0000e-005	1.7000e-003	7.0000e-005	1.7800e-003	4.9000e-004	7.0000e-005	5.6000e-004	0.0000	4.8616	4.8616	1.0000e-005	7.4000e-004	5.0810
Worker	4.4200e-003	2.7300e-003	0.0390	1.2000e-004	0.0154	7.0000e-005	0.0154	4.0900e-003	6.0000e-005	4.1600e-003	0.0000	11.2000	11.2000	2.9000e-004	2.9000e-004	11.2946
Total	**4.7100e-003**	**0.0146**	**0.0427**	**1.7000e-004**	**0.0171**	**1.4000e-004**	**0.0172**	**4.5800e-003**	**1.3000e-004**	**4.7200e-003**	**0.0000**	**16.0616**	**16.0616**	**3.0000e-004**	**1.0300e-003**	**16.3757**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0571	0.4300	1.0404	1.6700e-003		0.0209	0.0209		0.0193	0.0193	0.0000	145.3077	145.3077	0.0464	0.0000	146.4683
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0571**	**0.4300**	**1.0404**	**1.6700e-003**		**0.0209**	**0.0209**		**0.0193**	**0.0193**	**0.0000**	**145.3077**	**145.3077**	**0.0464**	**0.0000**	**146.4683**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	7.4800e-003	2.3400e-003	3.0000e-005	1.0800e-003	5.0000e-005	1.1300e-003	3.1000e-004	4.0000e-005	3.6000e-004	0.0000	3.0265	3.0265	1.0000e-005	4.6000e-004	3.1631
Worker	2.6400e-003	1.5800e-003	0.0234	8.0000e-005	9.7800e-003	4.0000e-005	9.8200e-003	2.6000e-003	4.0000e-005	2.6400e-003	0.0000	6.8999	6.8999	1.7000e-004	1.8000e-004	6.9567
Total	**2.8200e-003**	**9.0600e-003**	**0.0258**	**1.1000e-004**	**0.0109**	**9.0000e-005**	**0.0110**	**2.9100e-003**	**8.0000e-005**	**3.0000e-003**	**0.0000**	**9.9264**	**9.9264**	**1.8000e-004**	**6.4000e-004**	**10.1198**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0233	0.1075	1.2504	1.6700e-003		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	145.3075	145.3075	0.0464	0.0000	146.4681
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0233**	**0.1075**	**1.2504**	**1.6700e-003**		**3.4800e-003**	**3.4800e-003**		**3.4800e-003**	**3.4800e-003**	**0.0000**	**145.3075**	**145.3075**	**0.0464**	**0.0000**	**146.4681**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	7.4800e-003	2.3400e-003	3.0000e-005	1.0800e-003	5.0000e-005	1.1300e-003	3.1000e-004	4.0000e-005	3.6000e-004	0.0000	3.0265	3.0265	1.0000e-005	4.6000e-004	3.1631
Worker	2.6400e-003	1.5800e-003	0.0234	8.0000e-005	9.7800e-003	4.0000e-005	9.8200e-003	2.6000e-003	4.0000e-005	2.6400e-003	0.0000	6.8999	6.8999	1.7000e-004	1.8000e-004	6.9567
Total	**2.8200e-003**	**9.0600e-003**	**0.0258**	**1.1000e-004**	**0.0109**	**9.0000e-005**	**0.0110**	**2.9100e-003**	**8.0000e-005**	**3.0000e-003**	**0.0000**	**9.9264**	**9.9264**	**1.8000e-004**	**6.4000e-004**	**10.1198**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1332	1.3717	0.8136	2.9600e-003		0.0553	0.0553		0.0508	0.0508	0.0000	260.0112	260.0112	0.0841	0.0000	262.1135
Total	**0.1332**	**1.3717**	**0.8136**	**2.9600e-003**		**0.0553**	**0.0553**		**0.0508**	**0.0508**	**0.0000**	**260.0112**	**260.0112**	**0.0841**	**0.0000**	**262.1135**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0111	0.4513	0.1420	1.9500e-003	0.0642	2.7300e-003	0.0670	0.0186	2.6100e-003	0.0212	0.0000	187.2138	187.2138	5.3000e-004	0.0283	195.6652
Worker	0.0535	0.0343	0.4709	1.4300e-003	0.1744	8.3000e-004	0.1753	0.0464	7.6000e-004	0.0472	0.0000	131.5593	131.5593	3.6500e-003	3.5400e-003	132.7054
Total	**0.0646**	**0.4856**	**0.6128**	**3.3800e-003**	**0.2387**	**3.5600e-003**	**0.2422**	**0.0650**	**3.3700e-003**	**0.0684**	**0.0000**	**318.7731**	**318.7731**	**4.1800e-003**	**0.0319**	**328.3705**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0364	0.1578	1.3354	2.9600e-003		4.8600e-003	4.8600e-003		4.8600e-003	4.8600e-003	0.0000	260.0109	260.0109	0.0841	0.0000	262.1132
Total	**0.0364**	**0.1578**	**1.3354**	**2.9600e-003**		**4.8600e-003**	**4.8600e-003**		**4.8600e-003**	**4.8600e-003**	**0.0000**	**260.0109**	**260.0109**	**0.0841**	**0.0000**	**262.1132**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0111	0.4513	0.1420	1.9500e-003	0.0642	2.7300e-003	0.0670	0.0186	2.6100e-003	0.0212	0.0000	187.2138	187.2138	5.3000e-004	0.0283	195.6652
Worker	0.0535	0.0343	0.4709	1.4300e-003	0.1744	8.3000e-004	0.1753	0.0464	7.6000e-004	0.0472	0.0000	131.5593	131.5593	3.6500e-003	3.5400e-003	132.7054
Total	**0.0646**	**0.4856**	**0.6128**	**3.3800e-003**	**0.2387**	**3.5600e-003**	**0.2422**	**0.0650**	**3.3700e-003**	**0.0684**	**0.0000**	**318.7731**	**318.7731**	**4.1800e-003**	**0.0319**	**328.3705**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1498	1.4837	0.9456	3.5000e-003		0.0607	0.0607		0.0559	0.0559	0.0000	307.0654	307.0654	0.0993	0.0000	309.5481
Total	**0.1498**	**1.4837**	**0.9456**	**3.5000e-003**		**0.0607**	**0.0607**		**0.0559**	**0.0559**	**0.0000**	**307.0654**	**307.0654**	**0.0993**	**0.0000**	**309.5481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0129	0.5283	0.1656	2.2600e-003	0.0759	3.1900e-003	0.0791	0.0220	3.0500e-003	0.0250	0.0000	216.3405	216.3405	6.1000e-004	0.0327	226.1059
Worker	0.0592	0.0365	0.5220	1.6400e-003	0.2060	9.3000e-004	0.2069	0.0548	8.6000e-004	0.0557	0.0000	150.0803	150.0803	3.9200e-003	3.9300e-003	151.3482
Total	**0.0720**	**0.5648**	**0.6876**	**3.9000e-003**	**0.2819**	**4.1200e-003**	**0.2860**	**0.0768**	**3.9100e-003**	**0.0807**	**0.0000**	**366.4208**	**366.4208**	**4.5300e-003**	**0.0367**	**377.4542**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0430	0.1864	1.5772	3.5000e-003		5.7400e-003	5.7400e-003		5.7400e-003	5.7400e-003	0.0000	307.0650	307.0650	0.0993	0.0000	309.5478
Total	**0.0430**	**0.1864**	**1.5772**	**3.5000e-003**		**5.7400e-003**	**5.7400e-003**		**5.7400e-003**	**5.7400e-003**	**0.0000**	**307.0650**	**307.0650**	**0.0993**	**0.0000**	**309.5478**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0129	0.5283	0.1656	2.2600e-003	0.0759	3.1900e-003	0.0791	0.0220	3.0500e-003	0.0250	0.0000	216.3405	216.3405	6.1000e-004	0.0327	226.1059
Worker	0.0592	0.0365	0.5220	1.6400e-003	0.2060	9.3000e-004	0.2069	0.0548	8.6000e-004	0.0557	0.0000	150.0803	150.0803	3.9200e-003	3.9300e-003	151.3482
Total	**0.0720**	**0.5648**	**0.6876**	**3.9000e-003**	**0.2819**	**4.1200e-003**	**0.2860**	**0.0768**	**3.9100e-003**	**0.0807**	**0.0000**	**366.4208**	**366.4208**	**4.5300e-003**	**0.0367**	**377.4542**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1498	1.4837	0.9456	3.5000e-003		0.0607	0.0607		0.0559	0.0559	0.0000	307.0654	307.0654	0.0993	0.0000	309.5481
Total	**0.1498**	**1.4837**	**0.9456**	**3.5000e-003**		**0.0607**	**0.0607**		**0.0559**	**0.0559**	**0.0000**	**307.0654**	**307.0654**	**0.0993**	**0.0000**	**309.5481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0127	0.5236	0.1640	2.2100e-003	0.0759	3.1500e-003	0.0790	0.0220	3.0200e-003	0.0250	0.0000	211.7558	211.7558	5.9000e-004	0.0320	221.3132
Worker	0.0557	0.0333	0.4934	1.5900e-003	0.2060	8.9000e-004	0.2069	0.0548	8.2000e-004	0.0556	0.0000	145.3708	145.3708	3.5900e-003	3.7200e-003	146.5676
Total	**0.0684**	**0.5569**	**0.6574**	**3.8000e-003**	**0.2818**	**4.0400e-003**	**0.2859**	**0.0768**	**3.8400e-003**	**0.0806**	**0.0000**	**357.1266**	**357.1266**	**4.1800e-003**	**0.0357**	**367.8809**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0430	0.1864	1.5772	3.5000e-003		5.7400e-003	5.7400e-003		5.7400e-003	5.7400e-003	0.0000	307.0650	307.0650	0.0993	0.0000	309.5478
Total	**0.0430**	**0.1864**	**1.5772**	**3.5000e-003**		**5.7400e-003**	**5.7400e-003**		**5.7400e-003**	**5.7400e-003**	**0.0000**	**307.0650**	**307.0650**	**0.0993**	**0.0000**	**309.5478**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0127	0.5236	0.1640	2.2100e-003	0.0759	3.1500e-003	0.0790	0.0220	3.0200e-003	0.0250	0.0000	211.7558	211.7558	5.9000e-004	0.0320	221.3132
Worker	0.0557	0.0333	0.4934	1.5900e-003	0.2060	8.9000e-004	0.2069	0.0548	8.2000e-004	0.0556	0.0000	145.3708	145.3708	3.5900e-003	3.7200e-003	146.5676
Total	**0.0684**	**0.5569**	**0.6574**	**3.8000e-003**	**0.2818**	**4.0400e-003**	**0.2859**	**0.0768**	**3.8400e-003**	**0.0806**	**0.0000**	**357.1266**	**357.1266**	**4.1800e-003**	**0.0357**	**367.8809**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0235	0.2331	0.1485	5.5000e-004		9.5400e-003	9.5400e-003		8.7700e-003	8.7700e-003	0.0000	48.2363	48.2363	0.0156	0.0000	48.6263
Total	**0.0235**	**0.2331**	**0.1485**	**5.5000e-004**		**9.5400e-003**	**9.5400e-003**		**8.7700e-003**	**8.7700e-003**	**0.0000**	**48.2363**	**48.2363**	**0.0156**	**0.0000**	**48.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9700e-003	0.0816	0.0256	3.4000e-004	0.0119	4.9000e-004	0.0124	3.4500e-003	4.7000e-004	3.9200e-003	0.0000	32.5164	32.5164	9.0000e-005	4.9200e-003	33.9839
Worker	8.2500e-003	4.7900e-003	0.0737	2.4000e-004	0.0324	1.3000e-004	0.0325	8.6100e-003	1.2000e-004	8.7300e-003	0.0000	22.1679	22.1679	5.2000e-004	5.6000e-004	22.3465
Total	**0.0102**	**0.0864**	**0.0992**	**5.8000e-004**	**0.0443**	**6.2000e-004**	**0.0449**	**0.0121**	**5.9000e-004**	**0.0127**	**0.0000**	**54.6842**	**54.6842**	**6.1000e-004**	**5.4800e-003**	**56.3304**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7600e-003	0.0293	0.2478	5.5000e-004		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	48.2363	48.2363	0.0156	0.0000	48.6263
Total	**6.7600e-003**	**0.0293**	**0.2478**	**5.5000e-004**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**48.2363**	**48.2363**	**0.0156**	**0.0000**	**48.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9700e-003	0.0816	0.0256	3.4000e-004	0.0119	4.9000e-004	0.0124	3.4500e-003	4.7000e-004	3.9200e-003	0.0000	32.5164	32.5164	9.0000e-005	4.9200e-003	33.9839
Worker	8.2500e-003	4.7900e-003	0.0737	2.4000e-004	0.0324	1.3000e-004	0.0325	8.6100e-003	1.2000e-004	8.7300e-003	0.0000	22.1679	22.1679	5.2000e-004	5.6000e-004	22.3465
Total	**0.0102**	**0.0864**	**0.0992**	**5.8000e-004**	**0.0443**	**6.2000e-004**	**0.0449**	**0.0121**	**5.9000e-004**	**0.0127**	**0.0000**	**54.6842**	**54.6842**	**6.1000e-004**	**5.4800e-003**	**56.3304**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8467					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.1472	0.2325	3.8000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	32.8093	32.8093	1.7900e-003	0.0000	32.8541
Total	**0.8687**	**0.1472**	**0.2325**	**3.8000e-004**		**6.6200e-003**	**6.6200e-003**		**6.6200e-003**	**6.6200e-003**	**0.0000**	**32.8093**	**32.8093**	**1.7900e-003**	**0.0000**	**32.8541**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0116	7.1600e-003	0.1023	3.2000e-004	0.0404	1.8000e-004	0.0406	0.0107	1.7000e-004	0.0109	0.0000	29.4090	29.4090	7.7000e-004	7.7000e-004	29.6575
Total	**0.0116**	**7.1600e-003**	**0.1023**	**3.2000e-004**	**0.0404**	**1.8000e-004**	**0.0406**	**0.0107**	**1.7000e-004**	**0.0109**	**0.0000**	**29.4090**	**29.4090**	**7.7000e-004**	**7.7000e-004**	**29.6575**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8467					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.1472	0.2325	3.8000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	32.8093	32.8093	1.7900e-003	0.0000	32.8540
Total	**0.8687**	**0.1472**	**0.2325**	**3.8000e-004**		**6.6200e-003**	**6.6200e-003**		**6.6200e-003**	**6.6200e-003**	**0.0000**	**32.8093**	**32.8093**	**1.7900e-003**	**0.0000**	**32.8540**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0116	7.1600e-003	0.1023	3.2000e-004	0.0404	1.8000e-004	0.0406	0.0107	1.7000e-004	0.0109	0.0000	29.4090	29.4090	7.7000e-004	7.7000e-004	29.6575
Total	**0.0116**	**7.1600e-003**	**0.1023**	**3.2000e-004**	**0.0404**	**1.8000e-004**	**0.0406**	**0.0107**	**1.7000e-004**	**0.0109**	**0.0000**	**29.4090**	**29.4090**	**7.7000e-004**	**7.7000e-004**	**29.6575**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0131	0.0876	0.1384	2.3000e-004		3.9400e-003	3.9400e-003		3.9400e-003	3.9400e-003	0.0000	19.5324	19.5324	1.0700e-003	0.0000	19.5590
Total	**0.5171**	**0.0876**	**0.1384**	**2.3000e-004**		**3.9400e-003**	**3.9400e-003**		**3.9400e-003**	**3.9400e-003**	**0.0000**	**19.5324**	**19.5324**	**1.0700e-003**	**0.0000**	**19.5590**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-003	3.8800e-003	0.0576	1.8000e-004	0.0240	1.0000e-004	0.0241	6.4000e-003	1.0000e-004	6.4900e-003	0.0000	16.9587	16.9587	4.2000e-004	4.3000e-004	17.0983
Total	**6.5000e-003**	**3.8800e-003**	**0.0576**	**1.8000e-004**	**0.0240**	**1.0000e-004**	**0.0241**	**6.4000e-003**	**1.0000e-004**	**6.4900e-003**	**0.0000**	**16.9587**	**16.9587**	**4.2000e-004**	**4.3000e-004**	**17.0983**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0131	0.0876	0.1384	2.3000e-004		3.9400e-003	3.9400e-003		3.9400e-003	3.9400e-003	0.0000	19.5324	19.5324	1.0700e-003	0.0000	19.5590
Total	**0.5171**	**0.0876**	**0.1384**	**2.3000e-004**		**3.9400e-003**	**3.9400e-003**		**3.9400e-003**	**3.9400e-003**	**0.0000**	**19.5324**	**19.5324**	**1.0700e-003**	**0.0000**	**19.5590**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-003	3.8800e-003	0.0576	1.8000e-004	0.0240	1.0000e-004	0.0241	6.4000e-003	1.0000e-004	6.4900e-003	0.0000	16.9587	16.9587	4.2000e-004	4.3000e-004	17.0983
Total	**6.5000e-003**	**3.8800e-003**	**0.0576**	**1.8000e-004**	**0.0240**	**1.0000e-004**	**0.0241**	**6.4000e-003**	**1.0000e-004**	**6.4900e-003**	**0.0000**	**16.9587**	**16.9587**	**4.2000e-004**	**4.3000e-004**	**17.0983**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3673	1.8721	12.5093	0.0254	2.7711	0.0215	2.7926	0.7423	0.0202	0.7624	0.0000	2,344.5001	2,344.5001	0.1498	0.1276	2,386.2696
Unmitigated	1.3673	1.8721	12.5093	0.0254	2.7711	0.0215	2.7926	0.7423	0.0202	0.7624	0.0000	2,344.5001	2,344.5001	0.1498	0.1276	2,386.2696

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	3,297.08	2,374.12	2082.22	7,534,349	7,534,349
User Defined Industrial	0.00	0.00	0.00		
Total	3,297.08	2,374.12	2,082.22	7,534,349	7,534,349

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	9.50	7.30	7.30	64.90	16.10	19.00	73	25	2
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.474352	0.062718	0.210643	0.147759	0.030828	0.007876	0.016376	0.011784	0.000542	0.000449	0.031048	0.000930	0.004696
User Defined Industrial	0.474352	0.062718	0.210643	0.147759	0.030828	0.007876	0.016376	0.011784	0.000542	0.000449	0.031048	0.000930	0.004696

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	386.3386	386.3386	0.0625	7.5800e-003	390.1588
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	386.3386	386.3386	0.0625	7.5800e-003	390.1588
NaturalGas Mitigated	0.1257	1.1423	0.9595	6.8500e-003		0.0868	0.0868		0.0868	0.0868	0.0000	1,243.4813	1,243.4813	0.0238	0.0228	1,250.8707
NaturalGas Unmitigated	0.1257	1.1423	0.9595	6.8500e-003		0.0868	0.0868		0.0868	0.0868	0.0000	1,243.4813	1,243.4813	0.0238	0.0228	1,250.8707

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hospital	2.3302e+007	0.1257	1.1423	0.9595	6.8500e-003		0.0868	0.0868		0.0868	0.0868	0.0000	1,243.4813	1,243.4813	0.0238	0.0228	1,250.8707
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1257**	**1.1423**	**0.9595**	**6.8500e-003**		**0.0868**	**0.0868**		**0.0868**	**0.0868**	**0.0000**	**1,243.4813**	**1,243.4813**	**0.0238**	**0.0228**	**1,250.8707**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hospital	2.3302e+007	0.1257	1.1423	0.9595	6.8500e-003		0.0868	0.0868		0.0868	0.0868	0.0000	1,243.4813	1,243.4813	0.0238	0.0228	1,250.8707
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1257**	**1.1423**	**0.9595**	**6.8500e-003**		**0.0868**	**0.0868**		**0.0868**	**0.0868**	**0.0000**	**1,243.4813**	**1,243.4813**	**0.0238**	**0.0228**	**1,250.8707**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	4.17556e+006	386.3386	0.0625	7.5800e-003	390.1588
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**386.3386**	**0.0625**	**7.5800e-003**	**390.1588**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	4.17556e+006	386.3386	0.0625	7.5800e-003	390.1588
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**386.3386**	**0.0625**	**7.5800e-003**	**390.1588**

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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2429	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9900e-003	4.9900e-003	1.0000e-005	0.0000	5.3100e-003
Unmitigated	1.2429	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9900e-003	4.9900e-003	1.0000e-005	0.0000	5.3100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1076					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9900e-003	4.9900e-003	1.0000e-005	0.0000	5.3100e-003
Total	**1.2429**	**2.0000e-005**	**2.5600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9900e-003**	**4.9900e-003**	**1.0000e-005**	**0.0000**	**5.3100e-003**

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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1076					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9900e-003	4.9900e-003	1.0000e-005	0.0000	5.3100e-003
Total	**1.2429**	**2.0000e-005**	**2.5600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9900e-003**	**4.9900e-003**	**1.0000e-005**	**0.0000**	**5.3100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	30.6830	1.1399	0.0272	67.2922
Unmitigated	30.6830	1.1399	0.0272	67.2922

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	34.8836 / 6.64449	30.6830	1.1399	0.0272	67.2922
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**30.6830**	**1.1399**	**0.0272**	**67.2922**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	34.8836 / 6.64449	30.6830	1.1399	0.0272	67.2922
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**30.6830**	**1.1399**	**0.0272**	**67.2922**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	609.4601	36.0181	0.0000	1,509.9115
Unmitigated	609.4601	36.0181	0.0000	1,509.9115

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hospital	3002.4	609.4601	36.0181	0.0000	1,509.9115
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**609.4601**	**36.0181**	**0.0000**	**1,509.9115**

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Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hospital	3002.4	609.4601	36.0181	0.0000	1,509.9115
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**609.4601**	**36.0181**	**0.0000**	**1,509.9115**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	1	12	2682	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.0528	0.2362	0.1347	2.5000e-004		7.7700e-003	7.7700e-003		7.7700e-003	7.7700e-003	0.0000	24.5112	24.5112	3.4400e-003	0.0000	24.5971
Total	**0.0528**	**0.2362**	**0.1347**	**2.5000e-004**		**7.7700e-003**	**7.7700e-003**		**7.7700e-003**	**7.7700e-003**	**0.0000**	**24.5112**	**24.5112**	**3.4400e-003**	**0.0000**	**24.5971**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Kaiser Bed Tower Project - Bed Tower

Placer-Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	278.00	1000sqft	8.77	278,000.00	0
User Defined Industrial	1.00	User Defined Unit	0.13	5,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Bed Tower Project. Placer County.

Land Use - Project includes 278,000 SF bed tower and 5,600 SF generator yard.

Construction Phase - Project construction would begin January 2023, with buildout in February 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated construction equipment per applicant.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per information from applicant.

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Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed. Included 3 compactors.

Trips and VMT - Default trips assumed. Added vendor truck to demolition, grading, and paving for water truck.

Demolition - 4,055 tons of pavement removed.

Grading - Cut: 23,498 CY, Fill: 9,836 CY.

Vehicle Trips - Updated trip rates per traffic analysis.

Construction Off-road Equipment Mitigation - Water twice daily. Use of Tier 4 final equipment.

Stationary Sources - Emergency Generators and Fire Pumps - Two 2 MW emergency generators.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	0.00	15,654.00
tblAreaCoating	Area_Parking	0	15654
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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tblConstructionPhase	NumDays	10.00	168.00
tblConstructionPhase	NumDays	20.00	245.00
tblConstructionPhase	NumDays	20.00	893.00
tblConstructionPhase	NumDays	230.00	784.00
tblConstructionPhase	NumDays	20.00	410.00
tblGrading	AcresOfGrading	490.00	768.00
tblGrading	AcresOfGrading	252.00	279.00
tblGrading	MaterialExported	0.00	13,662.00
tblLandUse	LandUseSquareFeet	0.00	5,600.00
tblLandUse	LotAcreage	6.38	8.77
tblLandUse	LotAcreage	0.00	0.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	46.00	89.00
tblTripsAndVMT	WorkerTripNumber	28.00	15.00
tblTripsAndVMT	WorkerTripNumber	25.00	18.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	15.00
tblTripsAndVMT	WorkerTripNumber	91.00	201.00

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tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblVehicleTrips	ST_TR	7.72	8.54
tblVehicleTrips	SU_TR	6.77	7.49
tblVehicleTrips	WD_TR	10.72	11.86

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.3461	61.7082	62.5363	0.1261	23.7427	2.7230	26.4657	10.6375	2.5079	13.1454	0.0000	12,232.8574	12,232.8574	3.6458	0.2122	12,351.6453
2024	3.0046	27.1750	35.8213	0.0801	3.7673	1.1352	4.9025	0.6482	1.0471	1.5245	0.0000	7,962.1148	7,962.1148	2.0663	0.3235	8,095.9466
2025	9.3564	21.9506	28.5599	0.0849	2.7196	0.8028	3.5224	0.7353	0.7444	1.4797	0.0000	8,423.9024	8,423.9024	1.5149	0.3213	8,557.5164
2026	9.3165	21.8871	28.2338	0.0839	2.7196	0.8020	3.5216	0.7353	0.7437	1.4790	0.0000	8,329.1312	8,329.1312	1.5114	0.3132	8,460.2482
2027	1.7045	15.3620	12.4864	0.0561	2.2542	0.4955	2.7496	0.6116	0.4567	1.0683	0.0000	5,633.8323	5,633.8323	0.8694	0.2917	5,742.5010
Maximum	**9.3564**	**61.7082**	**62.5363**	**0.1261**	**23.7427**	**2.7230**	**26.4657**	**10.6375**	**2.5079**	**13.1454**	**0.0000**	**12,232.8574**	**12,232.8574**	**3.6458**	**0.3235**	**12,351.6453**

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Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.7190	8.0704	72.6961	0.1261	11.0057	0.2303	11.2359	4.8731	0.2297	5.1028	0.0000	12,232.8574	12,232.8574	3.6458	0.2122	12,351.6453
2024	1.3074	6.9931	42.0068	0.0801	2.3910	0.1473	2.5101	0.6482	0.1468	0.7655	0.0000	7,962.1148	7,962.1148	2.0663	0.3235	8,095.9466
2025	8.1310	8.1239	35.9302	0.0849	2.7196	0.1714	2.8910	0.7353	0.1696	0.9050	0.0000	8,423.9024	8,423.9024	1.5149	0.3213	8,557.5164
2026	8.0912	8.0604	35.6041	0.0839	2.7196	0.1707	2.8902	0.7353	0.1689	0.9042	0.0000	8,329.1312	8,329.1312	1.5114	0.3132	8,460.2482
2027	0.8863	5.4211	17.3262	0.0561	2.2542	0.0742	2.3284	0.6116	0.0726	0.6842	0.0000	5,633.8323	5,633.8323	0.8694	0.2917	5,742.5010
Maximum	**8.1310**	**8.1239**	**72.6961**	**0.1261**	**11.0057**	**0.2303**	**11.2359**	**4.8731**	**0.2297**	**5.1028**	**0.0000**	**12,232.8574**	**12,232.8574**	**3.6458**	**0.3235**	**12,351.6453**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**32.27**	**75.24**	**-21.43**	**0.00**	**40.09**	**86.68**	**46.90**	**43.12**	**85.68**	**55.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Energy	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
Mobile	9.8825	10.3935	76.9622	0.1631	17.5443	0.1304	17.6747	4.6823	0.1223	4.8046		16,600.2415	16,600.2415	0.9283	0.8140	16,866.0093
Stationary	8.8027	39.3650	22.4450	0.0423		1.2949	1.2949		1.2949	1.2949		4,503.1538	4,503.1538	0.6313		4,518.9373
Total	**26.1854**	**56.0177**	**104.6930**	**0.2429**	**17.5443**	**1.9011**	**19.4454**	**4.6823**	**1.8930**	**6.5752**		**28,614.1606**	**28,614.1606**	**1.7038**	**0.9517**	**28,940.3483**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Energy	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
Mobile	9.8825	10.3935	76.9622	0.1631	17.5443	0.1304	17.6747	4.6823	0.1223	4.8046		16,600.2415	16,600.2415	0.9283	0.8140	16,866.0093
Stationary	8.8027	39.3650	22.4450	0.0423		1.2949	1.2949		1.2949	1.2949		4,503.1538	4,503.1538	0.6313		4,518.9373
Total	**26.1854**	**56.0177**	**104.6930**	**0.2429**	**17.5443**	**1.9011**	**19.4454**	**4.6823**	**1.8930**	**6.5752**		**28,614.1606**	**28,614.1606**	**1.7038**	**0.9517**	**28,940.3483**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	2/21/2023	10/12/2023	5	168	
3	Grading	Grading	3/21/2023	2/26/2024	5	245	
4	Paving	Paving	3/21/2023	8/20/2026	5	893	
5	Building Construction	Building Construction	2/27/2024	2/27/2027	5	784	
6	Architectural Coating	Architectural Coating	1/7/2025	8/3/2026	5	410	

Acres of Grading (Site Preparation Phase): 279

Acres of Grading (Grading Phase): 768

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 425,400; Non-Residential Outdoor: 141,800; Striped Parking Area: 15,654

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OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Cranes	2	8.00	231	0.29
Demolition	Excavators	6	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Paving Equipment	3	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	3	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Scrapers	2	8.00	367	0.48
Paving	Excavators	3	8.00	158	0.38
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	3	8.00	231	0.29
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	15.00	2.00	401.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	10	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	20.00	2.00	1,708.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	15.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	201.00	89.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3387	0.0000	4.3387	0.6569	0.0000	0.6569			0.0000			0.0000
Off-Road	3.4194	33.2166	31.4610	0.0691		1.4814	1.4814		1.3629	1.3629		6,687.6770	6,687.6770	2.1629		6,741.7502
Total	**3.4194**	**33.2166**	**31.4610**	**0.0691**	**4.3387**	**1.4814**	**5.8200**	**0.6569**	**1.3629**	**2.0198**		**6,687.6770**	**6,687.6770**	**2.1629**		**6,741.7502**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0508	2.5966	0.6001	0.0122	0.3511	0.0239	0.3750	0.0963	0.0229	0.1191		1,292.3426	1,292.3426	2.3700e-003	0.2031	1,352.9239
Vendor	2.3800e-003	0.0879	0.0288	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.7746	42.7746	1.3000e-004	6.4600e-003	44.7042
Worker	0.0440	0.0230	0.3812	1.0900e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		109.9393	109.9393	2.7500e-003	2.6100e-003	110.7853
Total	**0.0972**	**2.7075**	**1.0101**	**0.0137**	**0.4878**	**0.0251**	**0.5129**	**0.1328**	**0.0240**	**0.1568**		**1,445.0564**	**1,445.0564**	**5.2500e-003**	**0.2122**	**1,508.4133**

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9524	0.0000	1.9524	0.2956	0.0000	0.2956			0.0000			0.0000
Off-Road	0.8490	3.6791	40.6614	0.0691		0.1132	0.1132		0.1132	0.1132	0.0000	6,687.6770	6,687.6770	2.1629		6,741.7502
Total	**0.8490**	**3.6791**	**40.6614**	**0.0691**	**1.9524**	**0.1132**	**2.0656**	**0.2956**	**0.1132**	**0.4088**	**0.0000**	**6,687.6770**	**6,687.6770**	**2.1629**		**6,741.7502**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0508	2.5966	0.6001	0.0122	0.3511	0.0239	0.3750	0.0963	0.0229	0.1191		1,292.3426	1,292.3426	2.3700e-003	0.2031	1,352.9239
Vendor	2.3800e-003	0.0879	0.0288	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.7746	42.7746	1.3000e-004	6.4600e-003	44.7042
Worker	0.0440	0.0230	0.3812	1.0900e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		109.9393	109.9393	2.7500e-003	2.6100e-003	110.7853
Total	**0.0972**	**2.7075**	**1.0101**	**0.0137**	**0.4878**	**0.0251**	**0.5129**	**0.1328**	**0.0240**	**0.1568**		**1,445.0564**	**1,445.0564**	**5.2500e-003**	**0.2122**	**1,508.4133**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.8275	0.0000	19.8275	10.1209	0.0000	10.1209			0.0000			0.0000
Off-Road	3.1716	32.3329	25.9145	0.0503		1.4999	1.4999		1.3799	1.3799		4,870.7093	4,870.7093	1.5753		4,910.0914
Total	**3.1716**	**32.3329**	**25.9145**	**0.0503**	**19.8275**	**1.4999**	**21.3273**	**10.1209**	**1.3799**	**11.5007**		**4,870.7093**	**4,870.7093**	**1.5753**		**4,910.0914**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0528	0.0276	0.4574	1.3100e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		131.9271	131.9271	3.3100e-003	3.1300e-003	132.9423
Total	**0.0528**	**0.0276**	**0.4574**	**1.3100e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**131.9271**	**131.9271**	**3.3100e-003**	**3.1300e-003**	**132.9423**

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9224	0.0000	8.9224	4.5544	0.0000	4.5544			0.0000			0.0000
Off-Road	0.6164	2.6712	30.1720	0.0503		0.0822	0.0822		0.0822	0.0822	0.0000	4,870.7093	4,870.7093	1.5753		4,910.0914
Total	**0.6164**	**2.6712**	**30.1720**	**0.0503**	**8.9224**	**0.0822**	**9.0045**	**4.5544**	**0.0822**	**4.6366**	**0.0000**	**4,870.7093**	**4,870.7093**	**1.5753**		**4,910.0914**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0528	0.0276	0.4574	1.3100e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		131.9271	131.9271	3.3100e-003	3.1300e-003	132.9423
Total	**0.0528**	**0.0276**	**0.4574**	**1.3100e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**131.9271**	**131.9271**	**3.3100e-003**	**3.1300e-003**	**132.9423**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3307	0.0000	3.3307	0.3599	0.0000	0.3599			0.0000			0.0000
Off-Road	2.2198	21.7153	22.4683	0.0468		0.8965	0.8965		0.8264	0.8264		4,509.5333	4,509.5333	1.4433		4,545.6166
Total	**2.2198**	**21.7153**	**22.4683**	**0.0468**	**3.3307**	**0.8965**	**4.2272**	**0.3599**	**0.8264**	**1.1863**		**4,509.5333**	**4,509.5333**	**1.4433**		**4,545.6166**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0177	0.9028	0.2087	4.2500e-003	0.1221	8.3200e-003	0.1304	0.0335	7.9600e-003	0.0414		449.3503	449.3503	8.2000e-004	0.0706	470.4146
Vendor	2.3800e-003	0.0879	0.0288	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.7746	42.7746	1.3000e-004	6.4600e-003	44.7042
Worker	0.0587	0.0306	0.5082	1.4500e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		146.5857	146.5857	3.6700e-003	3.4800e-003	147.7137
Total	**0.0787**	**1.0214**	**0.7457**	**6.1000e-003**	**0.2999**	**9.6600e-003**	**0.3096**	**0.0810**	**9.2100e-003**	**0.0902**		**638.7106**	**638.7106**	**4.6200e-003**	**0.0806**	**662.8324**

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4988	0.0000	1.4988	0.1620	0.0000	0.1620			0.0000			0.0000
Off-Road	0.6437	2.9442	25.8455	0.0468		0.0947	0.0947		0.0947	0.0947	0.0000	4,509.5333	4,509.5333	1.4433		4,545.6166
Total	**0.6437**	**2.9442**	**25.8455**	**0.0468**	**1.4988**	**0.0947**	**1.5935**	**0.1620**	**0.0947**	**0.2566**	**0.0000**	**4,509.5333**	**4,509.5333**	**1.4433**		**4,545.6166**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0177	0.9028	0.2087	4.2500e-003	0.1221	8.3200e-003	0.1304	0.0335	7.9600e-003	0.0414		449.3503	449.3503	8.2000e-004	0.0706	470.4146
Vendor	2.3800e-003	0.0879	0.0288	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.7746	42.7746	1.3000e-004	6.4600e-003	44.7042
Worker	0.0587	0.0306	0.5082	1.4500e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		146.5857	146.5857	3.6700e-003	3.4800e-003	147.7137
Total	**0.0787**	**1.0214**	**0.7457**	**6.1000e-003**	**0.2999**	**9.6600e-003**	**0.3096**	**0.0810**	**9.2100e-003**	**0.0902**		**638.7106**	**638.7106**	**4.6200e-003**	**0.0806**	**662.8324**

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3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3307	0.0000	3.3307	0.3599	0.0000	0.3599			0.0000			0.0000
Off-Road	2.1411	20.1025	22.1501	0.0468		0.8352	0.8352		0.7699	0.7699		4,507.9509	4,507.9509	1.4428		4,544.0214
Total	**2.1411**	**20.1025**	**22.1501**	**0.0468**	**3.3307**	**0.8352**	**4.1658**	**0.3599**	**0.7699**	**1.1298**		**4,507.9509**	**4,507.9509**	**1.4428**		**4,544.0214**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0176	0.8939	0.2090	4.1600e-003	0.1221	8.3100e-003	0.1304	0.0335	7.9500e-003	0.0414		440.4954	440.4954	8.2000e-004	0.0692	461.1446
Vendor	2.3300e-003	0.0873	0.0284	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		41.9286	41.9286	1.2000e-004	6.3400e-003	43.8206
Worker	0.0547	0.0274	0.4743	1.4000e-003	0.1643	7.5000e-004	0.1650	0.0436	6.9000e-004	0.0443		141.7443	141.7443	3.3300e-003	3.2500e-003	142.7962
Total	**0.0746**	**1.0086**	**0.7117**	**5.9600e-003**	**0.2999**	**9.6100e-003**	**0.3095**	**0.0810**	**9.1700e-003**	**0.0901**		**624.1682**	**624.1682**	**4.2700e-003**	**0.0788**	**647.7614**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4988	0.0000	1.4988	0.1620	0.0000	0.1620			0.0000			0.0000
Off-Road	0.6437	2.9442	25.8455	0.0468		0.0947	0.0947		0.0947	0.0947	0.0000	4,507.9509	4,507.9509	1.4428		4,544.0214
Total	**0.6437**	**2.9442**	**25.8455**	**0.0468**	**1.4988**	**0.0947**	**1.5935**	**0.1620**	**0.0947**	**0.2566**	**0.0000**	**4,507.9509**	**4,507.9509**	**1.4428**		**4,544.0214**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0176	0.8939	0.2090	4.1600e-003	0.1221	8.3100e-003	0.1304	0.0335	7.9500e-003	0.0414		440.4954	440.4954	8.2000e-004	0.0692	461.1446
Vendor	2.3300e-003	0.0873	0.0284	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		41.9286	41.9286	1.2000e-004	6.3400e-003	43.8206
Worker	0.0547	0.0274	0.4743	1.4000e-003	0.1643	7.5000e-004	0.1650	0.0436	6.9000e-004	0.0443		141.7443	141.7443	3.3300e-003	3.2500e-003	142.7962
Total	**0.0746**	**1.0086**	**0.7117**	**5.9600e-003**	**0.2999**	**9.6100e-003**	**0.3095**	**0.0810**	**9.1700e-003**	**0.0901**		**624.1682**	**624.1682**	**4.2700e-003**	**0.0788**	**647.7614**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7769	6.5001	12.5405	0.0201		0.3151	0.3151		0.2907	0.2907		1,929.2634	1,929.2634	0.6164		1,944.6731
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7769**	**6.5001**	**12.5405**	**0.0201**		**0.3151**	**0.3151**		**0.2907**	**0.2907**		**1,929.2634**	**1,929.2634**	**0.6164**		**1,944.6731**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0879	0.0288	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.7746	42.7746	1.3000e-004	6.4600e-003	44.7042
Worker	0.0440	0.0230	0.3812	1.0900e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		109.9393	109.9393	2.7500e-003	2.6100e-003	110.7853
Total	**0.0464**	**0.1109**	**0.4100**	**1.4900e-003**	**0.1368**	**1.1400e-003**	**0.1379**	**0.0366**	**1.0700e-003**	**0.0377**		**152.7138**	**152.7138**	**2.8800e-003**	**9.0700e-003**	**155.4894**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.2634	1,929.2634	0.6164		1,944.6731
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.2634**	**1,929.2634**	**0.6164**		**1,944.6731**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0879	0.0288	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.7746	42.7746	1.3000e-004	6.4600e-003	44.7042
Worker	0.0440	0.0230	0.3812	1.0900e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		109.9393	109.9393	2.7500e-003	2.6100e-003	110.7853
Total	**0.0464**	**0.1109**	**0.4100**	**1.4900e-003**	**0.1368**	**1.1400e-003**	**0.1379**	**0.0366**	**1.0700e-003**	**0.0377**		**152.7138**	**152.7138**	**2.8800e-003**	**9.0700e-003**	**155.4894**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7456	5.9560	12.5754	0.0201		0.2893	0.2893		0.2670	0.2670		1,929.7412	1,929.7412	0.6166		1,945.1549
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7456**	**5.9560**	**12.5754**	**0.0201**		**0.2893**	**0.2893**		**0.2670**	**0.2670**		**1,929.7412**	**1,929.7412**	**0.6166**		**1,945.1549**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3300e-003	0.0873	0.0284	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		41.9286	41.9286	1.2000e-004	6.3400e-003	43.8206
Worker	0.0410	0.0206	0.3557	1.0500e-003	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		106.3082	106.3082	2.5000e-003	2.4400e-003	107.0972
Total	**0.0433**	**0.1079**	**0.3841**	**1.4500e-003**	**0.1368**	**1.1100e-003**	**0.1379**	**0.0366**	**1.0500e-003**	**0.0376**		**148.2368**	**148.2368**	**2.6200e-003**	**8.7800e-003**	**150.9177**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.7412	1,929.7412	0.6166		1,945.1549
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.7412**	**1,929.7412**	**0.6166**		**1,945.1549**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3300e-003	0.0873	0.0284	4.0000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		41.9286	41.9286	1.2000e-004	6.3400e-003	43.8206
Worker	0.0410	0.0206	0.3557	1.0500e-003	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		106.3082	106.3082	2.5000e-003	2.4400e-003	107.0972
Total	**0.0433**	**0.1079**	**0.3841**	**1.4500e-003**	**0.1368**	**1.1100e-003**	**0.1379**	**0.0366**	**1.0500e-003**	**0.0376**		**148.2368**	**148.2368**	**2.6200e-003**	**8.7800e-003**	**150.9177**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6883	5.1809	12.5351	0.0201		0.2520	0.2520		0.2326	0.2326		1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6883**	**5.1809**	**12.5351**	**0.0201**		**0.2520**	**0.2520**		**0.2326**	**0.2326**		**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e-003	0.0866	0.0281	3.9000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.2000e-004	4.4300e-003		41.0256	41.0256	1.2000e-004	6.2000e-003	42.8767
Worker	0.0384	0.0185	0.3336	1.0200e-003	0.1232	5.3000e-004	0.1238	0.0327	4.9000e-004	0.0332		102.6710	102.6710	2.2700e-003	2.2900e-003	103.4103
Total	**0.0407**	**0.1051**	**0.3617**	**1.4100e-003**	**0.1368**	**1.0800e-003**	**0.1379**	**0.0366**	**1.0100e-003**	**0.0376**		**143.6966**	**143.6966**	**2.3900e-003**	**8.4900e-003**	**146.2870**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e-003	0.0866	0.0281	3.9000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.2000e-004	4.4300e-003		41.0256	41.0256	1.2000e-004	6.2000e-003	42.8767
Worker	0.0384	0.0185	0.3336	1.0200e-003	0.1232	5.3000e-004	0.1238	0.0327	4.9000e-004	0.0332		102.6710	102.6710	2.2700e-003	2.2900e-003	103.4103
Total	**0.0407**	**0.1051**	**0.3617**	**1.4100e-003**	**0.1368**	**1.0800e-003**	**0.1379**	**0.0366**	**1.0100e-003**	**0.0376**		**143.6966**	**143.6966**	**2.3900e-003**	**8.4900e-003**	**146.2870**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6883	5.1809	12.5351	0.0201		0.2520	0.2520		0.2326	0.2326		1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6883**	**5.1809**	**12.5351**	**0.0201**		**0.2520**	**0.2520**		**0.2326**	**0.2326**		**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2600e-003	0.0858	0.0278	3.8000e-004	0.0136	5.4000e-004	0.0141	3.9000e-003	5.2000e-004	4.4200e-003		40.1556	40.1556	1.2000e-004	6.0700e-003	41.9673
Worker	0.0362	0.0169	0.3152	9.8000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		99.4374	99.4374	2.0700e-003	2.1700e-003	100.1354
Total	**0.0385**	**0.1027**	**0.3430**	**1.3600e-003**	**0.1368**	**1.0500e-003**	**0.1378**	**0.0366**	**9.9000e-004**	**0.0376**		**139.5930**	**139.5930**	**2.1900e-003**	**8.2400e-003**	**142.1027**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2600e-003	0.0858	0.0278	3.8000e-004	0.0136	5.4000e-004	0.0141	3.9000e-003	5.2000e-004	4.4200e-003		40.1556	40.1556	1.2000e-004	6.0700e-003	41.9673
Worker	0.0362	0.0169	0.3152	9.8000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		99.4374	99.4374	2.0700e-003	2.1700e-003	100.1354
Total	**0.0385**	**0.1027**	**0.3430**	**1.3600e-003**	**0.1368**	**1.0500e-003**	**0.1378**	**0.0366**	**9.9000e-004**	**0.0376**		**139.5930**	**139.5930**	**2.1900e-003**	**8.2400e-003**	**142.1027**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2058	12.4139	7.3625	0.0268		0.5001	0.5001		0.4601	0.4601		2,593.7854	2,593.7854	0.8389		2,614.7574
Total	**1.2058**	**12.4139**	**7.3625**	**0.0268**		**0.5001**	**0.5001**		**0.4601**	**0.4601**		**2,593.7854**	**2,593.7854**	**0.8389**		**2,614.7574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1039	3.8864	1.2640	0.0177	0.6031	0.0246	0.6277	0.1736	0.0236	0.1972		1,865.8210	1,865.8210	5.4000e-003	0.2821	1,950.0148
Worker	0.5496	0.2754	4.7665	0.0141	1.6512	7.5000e-003	1.6587	0.4380	6.9000e-003	0.4449		1,424.5305	1,424.5305	0.0335	0.0327	1,435.1019
Total	**0.6534**	**4.1618**	**6.0305**	**0.0318**	**2.2542**	**0.0321**	**2.2863**	**0.6116**	**0.0305**	**0.6421**		**3,290.3514**	**3,290.3514**	**0.0389**	**0.3148**	**3,385.1166**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7854	2,593.7854	0.8389		2,614.7574
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7854**	**2,593.7854**	**0.8389**		**2,614.7574**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1039	3.8864	1.2640	0.0177	0.6031	0.0246	0.6277	0.1736	0.0236	0.1972		1,865.8210	1,865.8210	5.4000e-003	0.2821	1,950.0148
Worker	0.5496	0.2754	4.7665	0.0141	1.6512	7.5000e-003	1.6587	0.4380	6.9000e-003	0.4449		1,424.5305	1,424.5305	0.0335	0.0327	1,435.1019
Total	**0.6534**	**4.1618**	**6.0305**	**0.0318**	**2.2542**	**0.0321**	**2.2863**	**0.6116**	**0.0305**	**0.6421**		**3,290.3514**	**3,290.3514**	**0.0389**	**0.3148**	**3,385.1166**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1477	11.3692	7.2456	0.0268		0.4652	0.4652		0.4280	0.4280		2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**1.1477**	**11.3692**	**7.2456**	**0.0268**		**0.4652**	**0.4652**		**0.4280**	**0.4280**		**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1021	3.8521	1.2487	0.0173	0.6030	0.0244	0.6274	0.1736	0.0234	0.1970		1,825.6371	1,825.6371	5.2600e-003	0.2760	1,908.0136
Worker	0.5151	0.2483	4.4701	0.0136	1.6512	7.1600e-003	1.6583	0.4380	6.5900e-003	0.4446		1,375.7919	1,375.7919	0.0304	0.0307	1,385.6980
Total	**0.6173**	**4.1004**	**5.7188**	**0.0309**	**2.2542**	**0.0316**	**2.2858**	**0.6116**	**0.0299**	**0.6415**		**3,201.4290**	**3,201.4290**	**0.0356**	**0.3067**	**3,293.7116**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1021	3.8521	1.2487	0.0173	0.6030	0.0244	0.6274	0.1736	0.0234	0.1970		1,825.6371	1,825.6371	5.2600e-003	0.2760	1,908.0136
Worker	0.5151	0.2483	4.4701	0.0136	1.6512	7.1600e-003	1.6583	0.4380	6.5900e-003	0.4446		1,375.7919	1,375.7919	0.0304	0.0307	1,385.6980
Total	**0.6173**	**4.1004**	**5.7188**	**0.0309**	**2.2542**	**0.0316**	**2.2858**	**0.6116**	**0.0299**	**0.6415**		**3,201.4290**	**3,201.4290**	**0.0356**	**0.3067**	**3,293.7116**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1477	11.3692	7.2456	0.0268		0.4652	0.4652		0.4280	0.4280		2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**1.1477**	**11.3692**	**7.2456**	**0.0268**		**0.4652**	**0.4652**		**0.4280**	**0.4280**		**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1007	3.8176	1.2367	0.0169	0.6030	0.0241	0.6271	0.1736	0.0231	0.1967		1,786.9241	1,786.9241	5.1500e-003	0.2701	1,867.5464
Worker	0.4850	0.2262	4.2237	0.0132	1.6512	6.8000e-003	1.6580	0.4380	6.2600e-003	0.4442		1,332.4605	1,332.4605	0.0277	0.0291	1,341.8143
Total	**0.5856**	**4.0438**	**5.4604**	**0.0301**	**2.2542**	**0.0309**	**2.2851**	**0.6116**	**0.0293**	**0.6409**		**3,119.3846**	**3,119.3846**	**0.0329**	**0.2992**	**3,209.3608**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1007	3.8176	1.2367	0.0169	0.6030	0.0241	0.6271	0.1736	0.0231	0.1967		1,786.9241	1,786.9241	5.1500e-003	0.2701	1,867.5464
Worker	0.4850	0.2262	4.2237	0.0132	1.6512	6.8000e-003	1.6580	0.4380	6.2600e-003	0.4442		1,332.4605	1,332.4605	0.0277	0.0291	1,341.8143
Total	**0.5856**	**4.0438**	**5.4604**	**0.0301**	**2.2542**	**0.0309**	**2.2851**	**0.6116**	**0.0293**	**0.6409**		**3,119.3846**	**3,119.3846**	**0.0329**	**0.2992**	**3,209.3608**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1477	11.3692	7.2456	0.0268		0.4652	0.4652		0.4280	0.4280		2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**1.1477**	**11.3692**	**7.2456**	**0.0268**		**0.4652**	**0.4652**		**0.4280**	**0.4280**		**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0994	3.7851	1.2269	0.0165	0.6030	0.0238	0.6268	0.1736	0.0228	0.1964		1,746.7208	1,746.7208	5.0600e-003	0.2640	1,825.5279
Worker	0.4573	0.2077	4.0139	0.0128	1.6512	6.4000e-003	1.6576	0.4380	5.8900e-003	0.4439		1,293.3826	1,293.3826	0.0255	0.0277	1,302.2726
Total	**0.5567**	**3.9928**	**5.2407**	**0.0293**	**2.2542**	**0.0302**	**2.2844**	**0.6116**	**0.0287**	**0.6403**		**3,040.1035**	**3,040.1035**	**0.0305**	**0.2917**	**3,127.8005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0994	3.7851	1.2269	0.0165	0.6030	0.0238	0.6268	0.1736	0.0228	0.1964		1,746.7208	1,746.7208	5.0600e-003	0.2640	1,825.5279
Worker	0.4573	0.2077	4.0139	0.0128	1.6512	6.4000e-003	1.6576	0.4380	5.8900e-003	0.4439		1,293.3826	1,293.3826	0.0255	0.0277	1,302.2726
Total	**0.5567**	**3.9928**	**5.2407**	**0.0293**	**2.2542**	**0.0302**	**2.2844**	**0.6116**	**0.0287**	**0.6403**		**3,040.1035**	**3,040.1035**	**0.0305**	**0.2917**	**3,127.8005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1025	0.0494	0.8896	2.7100e-003	0.3286	1.4200e-003	0.3300	0.0872	1.3100e-003	0.0885		273.7894	273.7894	6.0500e-003	6.1100e-003	275.7608
Total	**0.1025**	**0.0494**	**0.8896**	**2.7100e-003**	**0.3286**	**1.4200e-003**	**0.3300**	**0.0872**	**1.3100e-003**	**0.0885**		**273.7894**	**273.7894**	**6.0500e-003**	**6.1100e-003**	**275.7608**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1025	0.0494	0.8896	2.7100e-003	0.3286	1.4200e-003	0.3300	0.0872	1.3100e-003	0.0885		273.7894	273.7894	6.0500e-003	6.1100e-003	275.7608
Total	**0.1025**	**0.0494**	**0.8896**	**2.7100e-003**	**0.3286**	**1.4200e-003**	**0.3300**	**0.0872**	**1.3100e-003**	**0.0885**		**273.7894**	**273.7894**	**6.0500e-003**	**6.1100e-003**	**275.7608**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0965	0.0450	0.8405	2.6200e-003	0.3286	1.3500e-003	0.3299	0.0872	1.2500e-003	0.0884		265.1663	265.1663	5.5200e-003	5.7800e-003	267.0277
Total	**0.0965**	**0.0450**	**0.8405**	**2.6200e-003**	**0.3286**	**1.3500e-003**	**0.3299**	**0.0872**	**1.2500e-003**	**0.0884**		**265.1663**	**265.1663**	**5.5200e-003**	**5.7800e-003**	**267.0277**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0965	0.0450	0.8405	2.6200e-003	0.3286	1.3500e-003	0.3299	0.0872	1.2500e-003	0.0884		265.1663	265.1663	5.5200e-003	5.7800e-003	267.0277
Total	**0.0965**	**0.0450**	**0.8405**	**2.6200e-003**	**0.3286**	**1.3500e-003**	**0.3299**	**0.0872**	**1.2500e-003**	**0.0884**		**265.1663**	**265.1663**	**5.5200e-003**	**5.7800e-003**	**267.0277**

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8825	10.3935	76.9622	0.1631	17.5443	0.1304	17.6747	4.6823	0.1223	4.8046		16,600.2415	16,600.2415	0.9283	0.8140	16,866.0093
Unmitigated	9.8825	10.3935	76.9622	0.1631	17.5443	0.1304	17.6747	4.6823	0.1223	4.8046		16,600.2415	16,600.2415	0.9283	0.8140	16,866.0093

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	3,297.08	2,374.12	2082.22	7,534,349	7,534,349
User Defined Industrial	0.00	0.00	0.00		
Total	3,297.08	2,374.12	2,082.22	7,534,349	7,534,349

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	9.50	7.30	7.30	64.90	16.10	19.00	73	25	2
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.474352	0.062718	0.210643	0.147759	0.030828	0.007876	0.016376	0.011784	0.000542	0.000449	0.031048	0.000930	0.004696
User Defined Industrial	0.474352	0.062718	0.210643	0.147759	0.030828	0.007876	0.016376	0.011784	0.000542	0.000449	0.031048	0.000930	0.004696

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
NaturalGas Unmitigated	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	63841	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.6885**	**6.2589**	**5.2575**	**0.0376**		**0.4757**	**0.4757**		**0.4757**	**0.4757**		**7,510.7043**	**7,510.7043**	**0.1440**	**0.1377**	**7,555.3366**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	63.841	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.6885**	**6.2589**	**5.2575**	**0.0376**		**0.4757**	**0.4757**		**0.4757**	**0.4757**		**7,510.7043**	**7,510.7043**	**0.1440**	**0.1377**	**7,555.3366**

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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Unmitigated	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6200e-003	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Total	**6.8118**	**2.6000e-004**	**0.0284**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0611**	**0.0611**	**1.6000e-004**		**0.0650**

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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6200e-003	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Total	**6.8118**	**2.6000e-004**	**0.0284**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0611**	**0.0611**	**1.6000e-004**		**0.0650**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	1	12	2682	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel	8.8027	39.3650	22.4450	0.0423		1.2949	1.2949		1.2949	1.2949		4,503.1538	4,503.1538	0.6313		4,518.9373
Total	**8.8027**	**39.3650**	**22.4450**	**0.0423**		**1.2949**	**1.2949**		**1.2949**	**1.2949**		**4,503.1538**	**4,503.1538**	**0.6313**		**4,518.9373**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Kaiser Bed Tower Project - Bed Tower

Placer-Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	278.00	1000sqft	8.77	278,000.00	0
User Defined Industrial	1.00	User Defined Unit	0.13	5,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Bed Tower Project. Placer County.

Land Use - Project includes 278,000 SF bed tower and 5,600 SF generator yard.

Construction Phase - Project construction would begin January 2023, with buildout in February 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated construction equipment per applicant.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per information from applicant.

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Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed. Included 3 compactors.

Trips and VMT - Default trips assumed. Added vendor truck to demolition, grading, and paving for water truck.

Demolition - 4,055 tons of pavement removed.

Grading - Cut: 23,498 CY, Fill: 9,836 CY.

Vehicle Trips - Updated trip rates per traffic analysis.

Construction Off-road Equipment Mitigation - Water twice daily. Use of Tier 4 final equipment.

Stationary Sources - Emergency Generators and Fire Pumps - Two 2 MW emergency generators.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	0.00	15,654.00
tblAreaCoating	Area_Parking	0	15654
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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tblConstructionPhase	NumDays	10.00	168.00
tblConstructionPhase	NumDays	20.00	245.00
tblConstructionPhase	NumDays	20.00	893.00
tblConstructionPhase	NumDays	230.00	784.00
tblConstructionPhase	NumDays	20.00	410.00
tblGrading	AcresOfGrading	490.00	768.00
tblGrading	AcresOfGrading	252.00	279.00
tblGrading	MaterialExported	0.00	13,662.00
tblLandUse	LandUseSquareFeet	0.00	5,600.00
tblLandUse	LotAcreage	6.38	8.77
tblLandUse	LotAcreage	0.00	0.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	46.00	89.00
tblTripsAndVMT	WorkerTripNumber	28.00	15.00
tblTripsAndVMT	WorkerTripNumber	25.00	18.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	15.00
tblTripsAndVMT	WorkerTripNumber	91.00	201.00

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tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblVehicleTrips	ST_TR	7.72	8.54
tblVehicleTrips	SU_TR	6.77	7.49
tblVehicleTrips	WD_TR	10.72	11.86

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.3336	61.8079	62.4242	0.1257	23.7427	2.7231	26.4657	10.6375	2.5079	13.1454	0.0000	12,195.3469	12,195.3469	3.6475	0.2129	12,314.6511
2024	2.9964	27.2659	35.7565	0.0786	3.7673	1.1352	4.9026	0.6482	1.0471	1.5245	0.0000	7,815.5686	7,815.5686	2.0672	0.3299	7,951.4520
2025	9.3041	22.3256	28.1272	0.0832	2.7196	0.8029	3.5225	0.7353	0.7445	1.4798	0.0000	8,255.8482	8,255.8482	1.5217	0.3282	8,391.7023
2026	9.2672	22.2531	27.8326	0.0823	2.7196	0.8021	3.5217	0.7353	0.7438	1.4791	0.0000	8,166.6953	8,166.6953	1.5177	0.3198	8,299.9311
2027	1.6663	15.7000	12.1996	0.0549	2.2542	0.4956	2.7497	0.6116	0.4568	1.0684	0.0000	5,511.0119	5,511.0119	0.8739	0.2968	5,621.3088
Maximum	**9.3041**	**61.8079**	**62.4242**	**0.1257**	**23.7427**	**2.7231**	**26.4657**	**10.6375**	**2.5079**	**13.1454**	**0.0000**	**12,195.3469**	**12,195.3469**	**3.6475**	**0.3299**	**12,314.6511**

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Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.7065	8.1701	72.5840	0.1257	11.0057	0.2303	11.2360	4.8731	0.2297	5.1028	0.0000	12,195.3469	12,195.3469	3.6475	0.2129	12,314.6511
2024	1.2593	7.3652	41.9420	0.0786	2.3910	0.1473	2.5102	0.6482	0.1468	0.7656	0.0000	7,815.5686	7,815.5686	2.0672	0.3299	7,951.4520
2025	8.0787	8.4988	35.4974	0.0832	2.7196	0.1715	2.8911	0.7353	0.1697	0.9051	0.0000	8,255.8482	8,255.8482	1.5217	0.3282	8,391.7023
2026	8.0419	8.4264	35.2029	0.0823	2.7196	0.1708	2.8903	0.7353	0.1690	0.9043	0.0000	8,166.6953	8,166.6953	1.5177	0.3198	8,299.9311
2027	0.8481	5.7591	17.0394	0.0549	2.2542	0.0743	2.3285	0.6116	0.0727	0.6843	0.0000	5,511.0119	5,511.0119	0.8739	0.2968	5,621.3088
Maximum	**8.0787**	**8.4988**	**72.5840**	**0.1257**	**11.0057**	**0.2303**	**11.2360**	**4.8731**	**0.2297**	**5.1028**	**0.0000**	**12,195.3469**	**12,195.3469**	**3.6475**	**0.3299**	**12,314.6511**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**32.58**	**74.41**	**-21.60**	**0.00**	**40.09**	**86.67**	**46.90**	**43.12**	**85.67**	**55.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Energy	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
Mobile	8.0687	11.9411	81.0338	0.1516	17.5443	0.1305	17.6748	4.6823	0.1224	4.8046		15,441.5812	15,441.5812	1.0730	0.8844	15,731.9632
Stationary	8.8027	39.3650	22.4450	0.0423		1.2949	1.2949		1.2949	1.2949		4,503.1538	4,503.1538	0.6313		4,518.9373
Total	**24.3716**	**57.5654**	**108.7647**	**0.2315**	**17.5443**	**1.9012**	**19.4455**	**4.6823**	**1.8931**	**6.5753**		**27,455.5003**	**27,455.5003**	**1.8485**	**1.0221**	**27,806.3022**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Energy	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
Mobile	8.0687	11.9411	81.0338	0.1516	17.5443	0.1305	17.6748	4.6823	0.1224	4.8046		15,441.5812	15,441.5812	1.0730	0.8844	15,731.9632
Stationary	8.8027	39.3650	22.4450	0.0423		1.2949	1.2949		1.2949	1.2949		4,503.1538	4,503.1538	0.6313		4,518.9373
Total	**24.3716**	**57.5654**	**108.7647**	**0.2315**	**17.5443**	**1.9012**	**19.4455**	**4.6823**	**1.8931**	**6.5753**		**27,455.5003**	**27,455.5003**	**1.8485**	**1.0221**	**27,806.3022**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	2/21/2023	10/12/2023	5	168	
3	Grading	Grading	3/21/2023	2/26/2024	5	245	
4	Paving	Paving	3/21/2023	8/20/2026	5	893	
5	Building Construction	Building Construction	2/27/2024	2/27/2027	5	784	
6	Architectural Coating	Architectural Coating	1/7/2025	8/3/2026	5	410	

Acres of Grading (Site Preparation Phase): 279

Acres of Grading (Grading Phase): 768

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 425,400; Non-Residential Outdoor: 141,800; Striped Parking Area: 15,654

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Cranes	2	8.00	231	0.29
Demolition	Excavators	6	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Paving Equipment	3	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

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Grading	Excavators	3	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Scrapers	2	8.00	367	0.48
Paving	Excavators	3	8.00	158	0.38
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	3	8.00	231	0.29
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	15.00	2.00	401.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	10	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	20.00	2.00	1,708.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	15.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	201.00	89.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3387	0.0000	4.3387	0.6569	0.0000	0.6569			0.0000			0.0000
Off-Road	3.4194	33.2166	31.4610	0.0691		1.4814	1.4814		1.3629	1.3629		6,687.6770	6,687.6770	2.1629		6,741.7502
Total	**3.4194**	**33.2166**	**31.4610**	**0.0691**	**4.3387**	**1.4814**	**5.8200**	**0.6569**	**1.3629**	**2.0198**		**6,687.6770**	**6,687.6770**	**2.1629**		**6,741.7502**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0470	2.7876	0.6128	0.0122	0.3511	0.0240	0.3750	0.0963	0.0229	0.1192		1,294.2271	1,294.2271	2.1900e-003	0.2034	1,354.8937
Vendor	2.2100e-003	0.0945	0.0299	4.1000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.8689	42.8689	1.2000e-004	6.4800e-003	44.8041
Worker	0.0409	0.0287	0.3476	9.8000e-004	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		99.0843	99.0843	3.2400e-003	3.0200e-003	100.0648
Total	**0.0902**	**2.9108**	**0.9903**	**0.0136**	**0.4878**	**0.0251**	**0.5129**	**0.1328**	**0.0240**	**0.1569**		**1,436.1802**	**1,436.1802**	**5.5500e-003**	**0.2129**	**1,499.7626**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9524	0.0000	1.9524	0.2956	0.0000	0.2956			0.0000			0.0000
Off-Road	0.8490	3.6791	40.6614	0.0691		0.1132	0.1132		0.1132	0.1132	0.0000	6,687.6770	6,687.6770	2.1629		6,741.7502
Total	**0.8490**	**3.6791**	**40.6614**	**0.0691**	**1.9524**	**0.1132**	**2.0656**	**0.2956**	**0.1132**	**0.4088**	**0.0000**	**6,687.6770**	**6,687.6770**	**2.1629**		**6,741.7502**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0470	2.7876	0.6128	0.0122	0.3511	0.0240	0.3750	0.0963	0.0229	0.1192		1,294.2271	1,294.2271	2.1900e-003	0.2034	1,354.8937
Vendor	2.2100e-003	0.0945	0.0299	4.1000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.8689	42.8689	1.2000e-004	6.4800e-003	44.8041
Worker	0.0409	0.0287	0.3476	9.8000e-004	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		99.0843	99.0843	3.2400e-003	3.0200e-003	100.0648
Total	**0.0902**	**2.9108**	**0.9903**	**0.0136**	**0.4878**	**0.0251**	**0.5129**	**0.1328**	**0.0240**	**0.1569**		**1,436.1802**	**1,436.1802**	**5.5500e-003**	**0.2129**	**1,499.7626**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.8275	0.0000	19.8275	10.1209	0.0000	10.1209			0.0000			0.0000
Off-Road	3.1716	32.3329	25.9145	0.0503		1.4999	1.4999		1.3799	1.3799		4,870.7093	4,870.7093	1.5753		4,910.0914
Total	**3.1716**	**32.3329**	**25.9145**	**0.0503**	**19.8275**	**1.4999**	**21.3273**	**10.1209**	**1.3799**	**11.5007**		**4,870.7093**	**4,870.7093**	**1.5753**		**4,910.0914**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0491	0.0344	0.4171	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		118.9011	118.9011	3.8900e-003	3.6200e-003	120.0778
Total	**0.0491**	**0.0344**	**0.4171**	**1.1800e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**118.9011**	**118.9011**	**3.8900e-003**	**3.6200e-003**	**120.0778**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9224	0.0000	8.9224	4.5544	0.0000	4.5544			0.0000			0.0000
Off-Road	0.6164	2.6712	30.1720	0.0503		0.0822	0.0822		0.0822	0.0822	0.0000	4,870.7093	4,870.7093	1.5753		4,910.0914
Total	**0.6164**	**2.6712**	**30.1720**	**0.0503**	**8.9224**	**0.0822**	**9.0045**	**4.5544**	**0.0822**	**4.6366**	**0.0000**	**4,870.7093**	**4,870.7093**	**1.5753**		**4,910.0914**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0491	0.0344	0.4171	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		118.9011	118.9011	3.8900e-003	3.6200e-003	120.0778
Total	**0.0491**	**0.0344**	**0.4171**	**1.1800e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**118.9011**	**118.9011**	**3.8900e-003**	**3.6200e-003**	**120.0778**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3307	0.0000	3.3307	0.3599	0.0000	0.3599			0.0000			0.0000
Off-Road	2.2198	21.7153	22.4683	0.0468		0.8965	0.8965		0.8264	0.8264		4,509.5333	4,509.5333	1.4433		4,545.6166
Total	**2.2198**	**21.7153**	**22.4683**	**0.0468**	**3.3307**	**0.8965**	**4.2272**	**0.3599**	**0.8264**	**1.1863**		**4,509.5333**	**4,509.5333**	**1.4433**		**4,545.6166**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0163	0.9693	0.2131	4.2500e-003	0.1221	8.3300e-003	0.1304	0.0335	7.9700e-003	0.0414		450.0056	450.0056	7.6000e-004	0.0707	471.0995
Vendor	2.2100e-003	0.0945	0.0299	4.1000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.8689	42.8689	1.2000e-004	6.4800e-003	44.8041
Worker	0.0546	0.0382	0.4635	1.3100e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		132.1123	132.1123	4.3200e-003	4.0200e-003	133.4197
Total	**0.0731**	**1.1020**	**0.7064**	**5.9700e-003**	**0.2999**	**9.6800e-003**	**0.3096**	**0.0810**	**9.2200e-003**	**0.0902**		**624.9868**	**624.9868**	**5.2000e-003**	**0.0812**	**649.3233**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4988	0.0000	1.4988	0.1620	0.0000	0.1620			0.0000			0.0000
Off-Road	0.6437	2.9442	25.8455	0.0468		0.0947	0.0947		0.0947	0.0947	0.0000	4,509.5333	4,509.5333	1.4433		4,545.6166
Total	**0.6437**	**2.9442**	**25.8455**	**0.0468**	**1.4988**	**0.0947**	**1.5935**	**0.1620**	**0.0947**	**0.2566**	**0.0000**	**4,509.5333**	**4,509.5333**	**1.4433**		**4,545.6166**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0163	0.9693	0.2131	4.2500e-003	0.1221	8.3300e-003	0.1304	0.0335	7.9700e-003	0.0414		450.0056	450.0056	7.6000e-004	0.0707	471.0995
Vendor	2.2100e-003	0.0945	0.0299	4.1000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.8689	42.8689	1.2000e-004	6.4800e-003	44.8041
Worker	0.0546	0.0382	0.4635	1.3100e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		132.1123	132.1123	4.3200e-003	4.0200e-003	133.4197
Total	**0.0731**	**1.1020**	**0.7064**	**5.9700e-003**	**0.2999**	**9.6800e-003**	**0.3096**	**0.0810**	**9.2200e-003**	**0.0902**		**624.9868**	**624.9868**	**5.2000e-003**	**0.0812**	**649.3233**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3307	0.0000	3.3307	0.3599	0.0000	0.3599			0.0000			0.0000
Off-Road	2.1411	20.1025	22.1501	0.0468		0.8352	0.8352		0.7699	0.7699		4,507.9509	4,507.9509	1.4428		4,544.0214
Total	**2.1411**	**20.1025**	**22.1501**	**0.0468**	**3.3307**	**0.8352**	**4.1658**	**0.3599**	**0.7699**	**1.1298**		**4,507.9509**	**4,507.9509**	**1.4428**		**4,544.0214**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0163	0.9598	0.2134	4.1700e-003	0.1221	8.3300e-003	0.1304	0.0335	7.9700e-003	0.0414		441.1467	441.1467	7.6000e-004	0.0693	461.8255
Vendor	2.1600e-003	0.0939	0.0294	4.0000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.0229	42.0229	1.1000e-004	6.3600e-003	43.9204
Worker	0.0510	0.0342	0.4336	1.2600e-003	0.1643	7.5000e-004	0.1650	0.0436	6.9000e-004	0.0443		127.7776	127.7776	3.9300e-003	3.7600e-003	128.9964
Total	**0.0694**	**1.0878**	**0.6764**	**5.8300e-003**	**0.2999**	**9.6400e-003**	**0.3095**	**0.0810**	**9.1900e-003**	**0.0901**		**610.9473**	**610.9473**	**4.8000e-003**	**0.0795**	**634.7422**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4988	0.0000	1.4988	0.1620	0.0000	0.1620			0.0000			0.0000
Off-Road	0.6437	2.9442	25.8455	0.0468		0.0947	0.0947		0.0947	0.0947	0.0000	4,507.9509	4,507.9509	1.4428		4,544.0214
Total	**0.6437**	**2.9442**	**25.8455**	**0.0468**	**1.4988**	**0.0947**	**1.5935**	**0.1620**	**0.0947**	**0.2566**	**0.0000**	**4,507.9509**	**4,507.9509**	**1.4428**		**4,544.0214**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0163	0.9598	0.2134	4.1700e-003	0.1221	8.3300e-003	0.1304	0.0335	7.9700e-003	0.0414		441.1467	441.1467	7.6000e-004	0.0693	461.8255
Vendor	2.1600e-003	0.0939	0.0294	4.0000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.0229	42.0229	1.1000e-004	6.3600e-003	43.9204
Worker	0.0510	0.0342	0.4336	1.2600e-003	0.1643	7.5000e-004	0.1650	0.0436	6.9000e-004	0.0443		127.7776	127.7776	3.9300e-003	3.7600e-003	128.9964
Total	**0.0694**	**1.0878**	**0.6764**	**5.8300e-003**	**0.2999**	**9.6400e-003**	**0.3095**	**0.0810**	**9.1900e-003**	**0.0901**		**610.9473**	**610.9473**	**4.8000e-003**	**0.0795**	**634.7422**

CalEEMod Version: CalEEMod.2020.4.0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7769	6.5001	12.5405	0.0201		0.3151	0.3151		0.2907	0.2907		1,929.2634	1,929.2634	0.6164		1,944.6731
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7769**	**6.5001**	**12.5405**	**0.0201**		**0.3151**	**0.3151**		**0.2907**	**0.2907**		**1,929.2634**	**1,929.2634**	**0.6164**		**1,944.6731**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0945	0.0299	4.1000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.8689	42.8689	1.2000e-004	6.4800e-003	44.8041
Worker	0.0409	0.0287	0.3476	9.8000e-004	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		99.0843	99.0843	3.2400e-003	3.0200e-003	100.0648
Total	**0.0431**	**0.1232**	**0.3775**	**1.3900e-003**	**0.1368**	**1.1500e-003**	**0.1379**	**0.0366**	**1.0700e-003**	**0.0377**		**141.9531**	**141.9531**	**3.3600e-003**	**9.5000e-003**	**144.8689**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.2634	1,929.2634	0.6164		1,944.6731
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.2634**	**1,929.2634**	**0.6164**		**1,944.6731**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0945	0.0299	4.1000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.8689	42.8689	1.2000e-004	6.4800e-003	44.8041
Worker	0.0409	0.0287	0.3476	9.8000e-004	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		99.0843	99.0843	3.2400e-003	3.0200e-003	100.0648
Total	**0.0431**	**0.1232**	**0.3775**	**1.3900e-003**	**0.1368**	**1.1500e-003**	**0.1379**	**0.0366**	**1.0700e-003**	**0.0377**		**141.9531**	**141.9531**	**3.3600e-003**	**9.5000e-003**	**144.8689**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7456	5.9560	12.5754	0.0201		0.2893	0.2893		0.2670	0.2670		1,929.7412	1,929.7412	0.6166		1,945.1549
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7456**	**5.9560**	**12.5754**	**0.0201**		**0.2893**	**0.2893**		**0.2670**	**0.2670**		**1,929.7412**	**1,929.7412**	**0.6166**		**1,945.1549**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0939	0.0294	4.0000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.0229	42.0229	1.1000e-004	6.3600e-003	43.9204
Worker	0.0382	0.0256	0.3252	9.5000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		95.8332	95.8332	2.9500e-003	2.8200e-003	96.7473
Total	**0.0404**	**0.1195**	**0.3546**	**1.3500e-003**	**0.1368**	**1.1200e-003**	**0.1379**	**0.0366**	**1.0500e-003**	**0.0376**		**137.8562**	**137.8562**	**3.0600e-003**	**9.1800e-003**	**140.6677**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.7412	1,929.7412	0.6166		1,945.1549
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.7412**	**1,929.7412**	**0.6166**		**1,945.1549**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0939	0.0294	4.0000e-004	0.0136	5.6000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		42.0229	42.0229	1.1000e-004	6.3600e-003	43.9204
Worker	0.0382	0.0256	0.3252	9.5000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		95.8332	95.8332	2.9500e-003	2.8200e-003	96.7473
Total	**0.0404**	**0.1195**	**0.3546**	**1.3500e-003**	**0.1368**	**1.1200e-003**	**0.1379**	**0.0366**	**1.0500e-003**	**0.0376**		**137.8562**	**137.8562**	**3.0600e-003**	**9.1800e-003**	**140.6677**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6883	5.1809	12.5351	0.0201		0.2520	0.2520		0.2326	0.2326		1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6883**	**5.1809**	**12.5351**	**0.0201**		**0.2520**	**0.2520**		**0.2326**	**0.2326**		**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1200e-003	0.0931	0.0291	3.9000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		41.1195	41.1195	1.1000e-004	6.2200e-003	42.9760
Worker	0.0358	0.0231	0.3055	9.2000e-004	0.1232	5.3000e-004	0.1238	0.0327	4.9000e-004	0.0332		92.5736	92.5736	2.6900e-003	2.6500e-003	93.4298
Total	**0.0380**	**0.1162**	**0.3346**	**1.3100e-003**	**0.1368**	**1.0800e-003**	**0.1379**	**0.0366**	**1.0200e-003**	**0.0376**		**133.6931**	**133.6931**	**2.8000e-003**	**8.8700e-003**	**136.4059**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1200e-003	0.0931	0.0291	3.9000e-004	0.0136	5.5000e-004	0.0141	3.9000e-003	5.3000e-004	4.4300e-003		41.1195	41.1195	1.1000e-004	6.2200e-003	42.9760
Worker	0.0358	0.0231	0.3055	9.2000e-004	0.1232	5.3000e-004	0.1238	0.0327	4.9000e-004	0.0332		92.5736	92.5736	2.6900e-003	2.6500e-003	93.4298
Total	**0.0380**	**0.1162**	**0.3346**	**1.3100e-003**	**0.1368**	**1.0800e-003**	**0.1379**	**0.0366**	**1.0200e-003**	**0.0376**		**133.6931**	**133.6931**	**2.8000e-003**	**8.8700e-003**	**136.4059**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6883	5.1809	12.5351	0.0201		0.2520	0.2520		0.2326	0.2326		1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6883**	**5.1809**	**12.5351**	**0.0201**		**0.2520**	**0.2520**		**0.2326**	**0.2326**		**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0923	0.0288	3.8000e-004	0.0136	5.4000e-004	0.0141	3.9000e-003	5.2000e-004	4.4200e-003		40.2489	40.2489	1.1000e-004	6.0900e-003	42.0658
Worker	0.0338	0.0210	0.2890	8.9000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		89.6710	89.6710	2.4600e-003	2.5100e-003	90.4792
Total	**0.0359**	**0.1133**	**0.3178**	**1.2700e-003**	**0.1368**	**1.0500e-003**	**0.1378**	**0.0366**	**9.9000e-004**	**0.0376**		**129.9198**	**129.9198**	**2.5700e-003**	**8.6000e-003**	**132.5451**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2810	1.2952	15.0655	0.0201		0.0419	0.0419		0.0419	0.0419	0.0000	1,929.8104	1,929.8104	0.6166		1,945.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2810**	**1.2952**	**15.0655**	**0.0201**		**0.0419**	**0.0419**		**0.0419**	**0.0419**	**0.0000**	**1,929.8104**	**1,929.8104**	**0.6166**		**1,945.2246**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0923	0.0288	3.8000e-004	0.0136	5.4000e-004	0.0141	3.9000e-003	5.2000e-004	4.4200e-003		40.2489	40.2489	1.1000e-004	6.0900e-003	42.0658
Worker	0.0338	0.0210	0.2890	8.9000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		89.6710	89.6710	2.4600e-003	2.5100e-003	90.4792
Total	**0.0359**	**0.1133**	**0.3178**	**1.2700e-003**	**0.1368**	**1.0500e-003**	**0.1378**	**0.0366**	**9.9000e-004**	**0.0376**		**129.9198**	**129.9198**	**2.5700e-003**	**8.6000e-003**	**132.5451**

CalEEMod Version: CalEEMod.2020.4.0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2058	12.4139	7.3625	0.0268		0.5001	0.5001		0.4601	0.4601		2,593.7854	2,593.7854	0.8389		2,614.7574
Total	**1.2058**	**12.4139**	**7.3625**	**0.0268**		**0.5001**	**0.5001**		**0.4601**	**0.4601**		**2,593.7854**	**2,593.7854**	**0.8389**		**2,614.7574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0963	4.1790	1.3100	0.0177	0.6031	0.0247	0.6278	0.1736	0.0237	0.1973		1,870.0207	1,870.0207	5.0600e-003	0.2829	1,954.4586
Worker	0.5120	0.3432	4.3573	0.0127	1.6512	7.5000e-003	1.6587	0.4380	6.9000e-003	0.4449		1,284.1652	1,284.1652	0.0395	0.0378	1,296.4135
Total	**0.6083**	**4.5222**	**5.6673**	**0.0304**	**2.2542**	**0.0322**	**2.2865**	**0.6116**	**0.0306**	**0.6422**		**3,154.1859**	**3,154.1859**	**0.0446**	**0.3207**	**3,250.8721**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7854	2,593.7854	0.8389		2,614.7574
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7854**	**2,593.7854**	**0.8389**		**2,614.7574**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0963	4.1790	1.3100	0.0177	0.6031	0.0247	0.6278	0.1736	0.0237	0.1973		1,870.0207	1,870.0207	5.0600e-003	0.2829	1,954.4586
Worker	0.5120	0.3432	4.3573	0.0127	1.6512	7.5000e-003	1.6587	0.4380	6.9000e-003	0.4449		1,284.1652	1,284.1652	0.0395	0.0378	1,296.4135
Total	**0.6083**	**4.5222**	**5.6673**	**0.0304**	**2.2542**	**0.0322**	**2.2865**	**0.6116**	**0.0306**	**0.6422**		**3,154.1859**	**3,154.1859**	**0.0446**	**0.3207**	**3,250.8721**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1477	11.3692	7.2456	0.0268		0.4652	0.4652		0.4280	0.4280		2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**1.1477**	**11.3692**	**7.2456**	**0.0268**		**0.4652**	**0.4652**		**0.4280**	**0.4280**		**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0945	4.1430	1.2940	0.0173	0.6030	0.0245	0.6275	0.1736	0.0235	0.1971		1,829.8186	1,829.8186	4.9300e-003	0.2768	1,912.4335
Worker	0.4801	0.3092	4.0940	0.0123	1.6512	7.1600e-003	1.6583	0.4380	6.5900e-003	0.4446		1,240.4862	1,240.4862	0.0360	0.0355	1,251.9598
Total	**0.5746**	**4.4522**	**5.3880**	**0.0296**	**2.2542**	**0.0317**	**2.2859**	**0.6116**	**0.0300**	**0.6416**		**3,070.3048**	**3,070.3048**	**0.0410**	**0.3123**	**3,164.3932**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0945	4.1430	1.2940	0.0173	0.6030	0.0245	0.6275	0.1736	0.0235	0.1971		1,829.8186	1,829.8186	4.9300e-003	0.2768	1,912.4335
Worker	0.4801	0.3092	4.0940	0.0123	1.6512	7.1600e-003	1.6583	0.4380	6.5900e-003	0.4446		1,240.4862	1,240.4862	0.0360	0.0355	1,251.9598
Total	**0.5746**	**4.4522**	**5.3880**	**0.0296**	**2.2542**	**0.0317**	**2.2859**	**0.6116**	**0.0300**	**0.6416**		**3,070.3048**	**3,070.3048**	**0.0410**	**0.3123**	**3,164.3932**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1477	11.3692	7.2456	0.0268		0.4652	0.4652		0.4280	0.4280		2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**1.1477**	**11.3692**	**7.2456**	**0.0268**		**0.4652**	**0.4652**		**0.4280**	**0.4280**		**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0930	4.1067	1.2813	0.0170	0.6030	0.0242	0.6272	0.1736	0.0232	0.1968		1,791.0744	1,791.0744	4.8200e-003	0.2709	1,871.9297
Worker	0.4524	0.2814	3.8729	0.0119	1.6512	6.8000e-003	1.6580	0.4380	6.2600e-003	0.4442		1,201.5911	1,201.5911	0.0330	0.0336	1,212.4214
Total	**0.5454**	**4.3881**	**5.1542**	**0.0288**	**2.2542**	**0.0310**	**2.2852**	**0.6116**	**0.0294**	**0.6410**		**2,992.6655**	**2,992.6655**	**0.0378**	**0.3045**	**3,084.3512**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0930	4.1067	1.2813	0.0170	0.6030	0.0242	0.6272	0.1736	0.0232	0.1968		1,791.0744	1,791.0744	4.8200e-003	0.2709	1,871.9297
Worker	0.4524	0.2814	3.8729	0.0119	1.6512	6.8000e-003	1.6580	0.4380	6.2600e-003	0.4442		1,201.5911	1,201.5911	0.0330	0.0336	1,212.4214
Total	**0.5454**	**4.3881**	**5.1542**	**0.0288**	**2.2542**	**0.0310**	**2.2852**	**0.6116**	**0.0294**	**0.6410**		**2,992.6655**	**2,992.6655**	**0.0378**	**0.3045**	**3,084.3512**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1477	11.3692	7.2456	0.0268		0.4652	0.4652		0.4280	0.4280		2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**1.1477**	**11.3692**	**7.2456**	**0.0268**		**0.4652**	**0.4652**		**0.4280**	**0.4280**		**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0917	4.0726	1.2709	0.0166	0.6030	0.0239	0.6269	0.1736	0.0229	0.1965		1,750.8337	1,750.8337	4.7200e-003	0.2648	1,829.8689
Worker	0.4268	0.2582	3.6831	0.0115	1.6512	6.4000e-003	1.6576	0.4380	5.8900e-003	0.4439		1,166.4493	1,166.4493	0.0304	0.0320	1,176.7394
Total	**0.5185**	**4.3308**	**4.9540**	**0.0281**	**2.2542**	**0.0303**	**2.2845**	**0.6116**	**0.0288**	**0.6404**		**2,917.2830**	**2,917.2830**	**0.0351**	**0.2968**	**3,006.6083**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	1.4283	12.0855	0.0268		0.0440	0.0440		0.0440	0.0440	0.0000	2,593.7289	2,593.7289	0.8389		2,614.7005
Total	**0.3296**	**1.4283**	**12.0855**	**0.0268**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**2,593.7289**	**2,593.7289**	**0.8389**		**2,614.7005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0917	4.0726	1.2709	0.0166	0.6030	0.0239	0.6269	0.1736	0.0229	0.1965		1,750.8337	1,750.8337	4.7200e-003	0.2648	1,829.8689
Worker	0.4268	0.2582	3.6831	0.0115	1.6512	6.4000e-003	1.6576	0.4380	5.8900e-003	0.4439		1,166.4493	1,166.4493	0.0304	0.0320	1,176.7394
Total	**0.5185**	**4.3308**	**4.9540**	**0.0281**	**2.2542**	**0.0303**	**2.2845**	**0.6116**	**0.0288**	**0.6404**		**2,917.2830**	**2,917.2830**	**0.0351**	**0.2968**	**3,006.6083**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0956	0.0615	0.8147	2.4400e-003	0.3286	1.4200e-003	0.3300	0.0872	1.3100e-003	0.0885		246.8629	246.8629	7.1700e-003	7.0600e-003	249.1462
Total	**0.0956**	**0.0615**	**0.8147**	**2.4400e-003**	**0.3286**	**1.4200e-003**	**0.3300**	**0.0872**	**1.3100e-003**	**0.0885**		**246.8629**	**246.8629**	**7.1700e-003**	**7.0600e-003**	**249.1462**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0956	0.0615	0.8147	2.4400e-003	0.3286	1.4200e-003	0.3300	0.0872	1.3100e-003	0.0885		246.8629	246.8629	7.1700e-003	7.0600e-003	249.1462
Total	**0.0956**	**0.0615**	**0.8147**	**2.4400e-003**	**0.3286**	**1.4200e-003**	**0.3300**	**0.0872**	**1.3100e-003**	**0.0885**		**246.8629**	**246.8629**	**7.1700e-003**	**7.0600e-003**	**249.1462**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0900	0.0560	0.7707	2.3700e-003	0.3286	1.3500e-003	0.3299	0.0872	1.2500e-003	0.0884		239.1226	239.1226	6.5700e-003	6.6800e-003	241.2779
Total	**0.0900**	**0.0560**	**0.7707**	**2.3700e-003**	**0.3286**	**1.3500e-003**	**0.3299**	**0.0872**	**1.2500e-003**	**0.0884**		**239.1226**	**239.1226**	**6.5700e-003**	**6.6800e-003**	**241.2779**

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.5891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.7600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0900	0.0560	0.7707	2.3700e-003	0.3286	1.3500e-003	0.3299	0.0872	1.2500e-003	0.0884		239.1226	239.1226	6.5700e-003	6.6800e-003	241.2779
Total	**0.0900**	**0.0560**	**0.7707**	**2.3700e-003**	**0.3286**	**1.3500e-003**	**0.3299**	**0.0872**	**1.2500e-003**	**0.0884**		**239.1226**	**239.1226**	**6.5700e-003**	**6.6800e-003**	**241.2779**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	8.0687	11.9411	81.0338	0.1516	17.5443	0.1305	17.6748	4.6823	0.1224	4.8046		15,441.5812	15,441.5812	1.0730	0.8844	15,731.9632
Unmitigated	8.0687	11.9411	81.0338	0.1516	17.5443	0.1305	17.6748	4.6823	0.1224	4.8046		15,441.5812	15,441.5812	1.0730	0.8844	15,731.9632

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	3,297.08	2,374.12	2082.22	7,534,349	7,534,349
User Defined Industrial	0.00	0.00	0.00		
Total	3,297.08	2,374.12	2,082.22	7,534,349	7,534,349

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	9.50	7.30	7.30	64.90	16.10	19.00	73	25	2
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.474352	0.062718	0.210643	0.147759	0.030828	0.007876	0.016376	0.011784	0.000542	0.000449	0.031048	0.000930	0.004696
User Defined Industrial	0.474352	0.062718	0.210643	0.147759	0.030828	0.007876	0.016376	0.011784	0.000542	0.000449	0.031048	0.000930	0.004696

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
NaturalGas Unmitigated	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	63841	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.6885**	**6.2589**	**5.2575**	**0.0376**		**0.4757**	**0.4757**		**0.4757**	**0.4757**		**7,510.7043**	**7,510.7043**	**0.1440**	**0.1377**	**7,555.3366**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	63.841	0.6885	6.2589	5.2575	0.0376		0.4757	0.4757		0.4757	0.4757		7,510.7043	7,510.7043	0.1440	0.1377	7,555.3366
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.6885**	**6.2589**	**5.2575**	**0.0376**		**0.4757**	**0.4757**		**0.4757**	**0.4757**		**7,510.7043**	**7,510.7043**	**0.1440**	**0.1377**	**7,555.3366**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Unmitigated	6.8118	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6200e-003	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Total	**6.8118**	**2.6000e-004**	**0.0284**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0611**	**0.0611**	**1.6000e-004**		**0.0650**

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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6200e-003	2.6000e-004	0.0284	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0611	0.0611	1.6000e-004		0.0650
Total	**6.8118**	**2.6000e-004**	**0.0284**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0611**	**0.0611**	**1.6000e-004**		**0.0650**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	1	12	2682	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel	8.8027	39.3650	22.4450	0.0423		1.2949	1.2949		1.2949	1.2949		4,503.1538	4,503.1538	0.6313		4,518.9373
Total	**8.8027**	**39.3650**	**22.4450**	**0.0423**		**1.2949**	**1.2949**		**1.2949**	**1.2949**		**4,503.1538**	**4,503.1538**	**0.6313**		**4,518.9373**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Kaiser Bed Tower Project - Parking Garage

Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	260.96	1000sqft	2.85	260,959.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Bed Tower Project. Placer County.

Land Use - Project includes 260,897 SF parking garage.

Construction Phase - Project construction would begin January 2023 with buildout in June 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per applicant.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per applicant.

Trips and VMT - Default trips assumed.

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Demolition -

Grading - Cut: 4,015 CY, Fill: 4,116 CY

Architectural Coating -

Construction Off-road Equipment Mitigation - Water twice daily. Use of Tier 4 equipment.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	0	141800
tblAreaCoating	Area_Nonresidential_Interior	0	425400
tblAreaCoating	Area_Parking	15658	15654
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	298.00
tblConstructionPhase	NumDays	6.00	40.00
tblConstructionPhase	NumDays	3.00	37.00

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tblEnergyUse	T24E	3.50	3.92
tblFleetMix	HHD	0.01	0.00
tblFleetMix	LDA	0.47	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.8760e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	4.6960e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	5.4200e-004	0.00
tblFleetMix	SBUS	9.3000e-004	0.00
tblFleetMix	UBUS	4.4900e-004	0.00
tblGrading	MaterialImported	0.00	101.00
tblLandUse	LandUseSquareFeet	260,960.00	260,959.00
tblLandUse	LotAcreage	5.99	2.85
tblTripsAndVMT	VendorTripNumber	43.00	44.00
tblTripsAndVMT	WorkerTripNumber	110.00	112.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2339	1.9561	1.9003	4.5500e-003	0.2771	0.0778	0.3549	0.1005	0.0737	0.1742	0.0000	397.6326	397.6326	0.0612	0.0131	403.0725
2024	0.1179	0.9235	1.0522	2.5200e-003	0.0718	0.0341	0.1059	0.0195	0.0326	0.0522	0.0000	220.0563	220.0563	0.0251	8.8900e-003	223.3320
Maximum	**0.2339**	**1.9561**	**1.9003**	**4.5500e-003**	**0.2771**	**0.0778**	**0.3549**	**0.1005**	**0.0737**	**0.1742**	**0.0000**	**397.6326**	**397.6326**	**0.0612**	**0.0131**	**403.0725**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1279	0.7044	2.0934	4.5500e-003	0.2771	0.0202	0.2973	0.1005	0.0201	0.1206	0.0000	397.6323	397.6323	0.0612	0.0131	403.0722
2024	0.0753	0.4424	1.1344	2.5200e-003	0.0718	0.0114	0.0832	0.0195	0.0113	0.0309	0.0000	220.0561	220.0561	0.0251	8.8900e-003	223.3318
Maximum	**0.1279**	**0.7044**	**2.0934**	**4.5500e-003**	**0.2771**	**0.0202**	**0.2973**	**0.1005**	**0.0201**	**0.1206**	**0.0000**	**397.6323**	**397.6323**	**0.0612**	**0.0131**	**403.0722**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**42.21**	**60.17**	**-9.32**	**0.00**	**0.00**	**71.76**	**17.43**	**0.00**	**70.41**	**33.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1522	2.0000e-005	2.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6600e-003	4.6600e-003	1.0000e-005	0.0000	4.9700e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	141.4892	141.4892	0.0229	2.7700e-003	142.8883
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1522**	**2.0000e-005**	**2.3900e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**141.4938**	**141.4938**	**0.0229**	**2.7700e-003**	**142.8932**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1522	2.0000e-005	2.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6600e-003	4.6600e-003	1.0000e-005	0.0000	4.9700e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	141.4892	141.4892	0.0229	2.7700e-003	142.8883
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1522**	**2.0000e-005**	**2.3900e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**141.4938**	**141.4938**	**0.0229**	**2.7700e-003**	**142.8932**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/26/2023	3/17/2023	5	37	
2	Grading	Grading	3/6/2023	4/28/2023	5	40	
3	Building Construction	Building Construction	5/1/2023	6/19/2024	5	298	

Acres of Grading (Site Preparation Phase): 55.5

Acres of Grading (Grading Phase): 40

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Plate Compactors	3	8.00	8	0.43
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

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Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	112.00	44.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0294	0.0000	0.0294	3.1800e-003	0.0000	3.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2781	0.1927	4.8000e-004		0.0106	0.0106		9.7600e-003	9.7600e-003	0.0000	41.5931	41.5931	0.0131	0.0000	41.9199
Total	**0.0263**	**0.2781**	**0.1927**	**4.8000e-004**	**0.0294**	**0.0106**	**0.0400**	**3.1800e-003**	**9.7600e-003**	**0.0129**	**0.0000**	**41.5931**	**41.5931**	**0.0131**	**0.0000**	**41.9199**

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.8000e-004	6.3000e-003	2.0000e-005	2.1800e-003	1.0000e-005	2.1900e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.6996	1.6996	5.0000e-005	5.0000e-005	1.7149
Total	**7.2000e-004**	**4.8000e-004**	**6.3000e-003**	**2.0000e-005**	**2.1800e-003**	**1.0000e-005**	**2.1900e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.6996**	**1.6996**	**5.0000e-005**	**5.0000e-005**	**1.7149**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0294	0.0000	0.0294	3.1800e-003	0.0000	3.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.0381	0.2311	4.8000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	41.5931	41.5931	0.0131	0.0000	41.9199
Total	**7.7900e-003**	**0.0381**	**0.2311**	**4.8000e-004**	**0.0294**	**1.2800e-003**	**0.0307**	**3.1800e-003**	**1.2800e-003**	**4.4600e-003**	**0.0000**	**41.5931**	**41.5931**	**0.0131**	**0.0000**	**41.9199**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.8000e-004	6.3000e-003	2.0000e-005	2.1800e-003	1.0000e-005	2.1900e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.6996	1.6996	5.0000e-005	5.0000e-005	1.7149
Total	**7.2000e-004**	**4.8000e-004**	**6.3000e-003**	**2.0000e-005**	**2.1800e-003**	**1.0000e-005**	**2.1900e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.6996**	**1.6996**	**5.0000e-005**	**5.0000e-005**	**1.7149**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1417	0.0000	0.1417	0.0685	0.0000	0.0685	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.2894	0.1741	4.1000e-004		0.0121	0.0121		0.0111	0.0111	0.0000	36.2078	36.2078	0.0117	0.0000	36.5006
Total	**0.0267**	**0.2894**	**0.1741**	**4.1000e-004**	**0.1417**	**0.0121**	**0.1538**	**0.0685**	**0.0111**	**0.0796**	**0.0000**	**36.2078**	**36.2078**	**0.0117**	**0.0000**	**36.5006**

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	2.0000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3803	0.3803	0.0000	6.0000e-005	0.3981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.5000e-004	4.5400e-003	1.0000e-005	1.5700e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2249	1.2249	4.0000e-005	3.0000e-005	1.2360
Total	**5.4000e-004**	**1.2400e-003**	**4.7400e-003**	**1.0000e-005**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**	**4.5000e-004**	**2.0000e-005**	**4.7000e-004**	**0.0000**	**1.6052**	**1.6052**	**4.0000e-005**	**9.0000e-005**	**1.6341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1417	0.0000	0.1417	0.0685	0.0000	0.0685	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0400e-003	0.0219	0.2181	4.1000e-004		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	36.2078	36.2078	0.0117	0.0000	36.5005
Total	**5.0400e-003**	**0.0219**	**0.2181**	**4.1000e-004**	**0.1417**	**6.7000e-004**	**0.1423**	**0.0685**	**6.7000e-004**	**0.0692**	**0.0000**	**36.2078**	**36.2078**	**0.0117**	**0.0000**	**36.5005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	2.0000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3803	0.3803	0.0000	6.0000e-005	0.3981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.5000e-004	4.5400e-003	1.0000e-005	1.5700e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2249	1.2249	4.0000e-005	3.0000e-005	1.2360
Total	**5.4000e-004**	**1.2400e-003**	**4.7400e-003**	**1.0000e-005**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**	**4.5000e-004**	**2.0000e-005**	**4.7000e-004**	**0.0000**	**1.6052**	**1.6052**	**4.0000e-005**	**9.0000e-005**	**1.6341**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1499	1.1921	1.2438	2.1900e-003		0.0537	0.0537		0.0515	0.0515	0.0000	181.7393	181.7393	0.0344	0.0000	182.5985
Total	**0.1499**	**1.1921**	**1.2438**	**2.1900e-003**		**0.0537**	**0.0537**		**0.0515**	**0.0515**	**0.0000**	**181.7393**	**181.7393**	**0.0344**	**0.0000**	**182.5985**

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4200e-003	0.1778	0.0564	7.8000e-004	0.0252	1.0700e-003	0.0262	7.2800e-003	1.0200e-003	8.3000e-003	0.0000	74.7676	74.7676	2.1000e-004	0.0113	78.1420
Worker	0.0253	0.0170	0.2224	6.5000e-004	0.0770	3.8000e-004	0.0773	0.0205	3.5000e-004	0.0208	0.0000	60.0200	60.0200	1.7700e-003	1.6700e-003	60.5625
Total	**0.0297**	**0.1948**	**0.2787**	**1.4300e-003**	**0.1021**	**1.4500e-003**	**0.1036**	**0.0278**	**1.3700e-003**	**0.0291**	**0.0000**	**134.7876**	**134.7876**	**1.9800e-003**	**0.0130**	**138.7044**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0841	0.4480	1.3544	2.1900e-003		0.0168	0.0168		0.0168	0.0168	0.0000	181.7391	181.7391	0.0344	0.0000	182.5983
Total	**0.0841**	**0.4480**	**1.3544**	**2.1900e-003**		**0.0168**	**0.0168**		**0.0168**	**0.0168**	**0.0000**	**181.7391**	**181.7391**	**0.0344**	**0.0000**	**182.5983**

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4200e-003	0.1778	0.0564	7.8000e-004	0.0252	1.0700e-003	0.0262	7.2800e-003	1.0200e-003	8.3000e-003	0.0000	74.7676	74.7676	2.1000e-004	0.0113	78.1420
Worker	0.0253	0.0170	0.2224	6.5000e-004	0.0770	3.8000e-004	0.0773	0.0205	3.5000e-004	0.0208	0.0000	60.0200	60.0200	1.7700e-003	1.6700e-003	60.5625
Total	**0.0297**	**0.1948**	**0.2787**	**1.4300e-003**	**0.1021**	**1.4500e-003**	**0.1036**	**0.0278**	**1.3700e-003**	**0.0291**	**0.0000**	**134.7876**	**134.7876**	**1.9800e-003**	**0.0130**	**138.7044**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0982	0.7886	0.8672	1.5400e-003		0.0331	0.0331		0.0317	0.0317	0.0000	127.7441	127.7441	0.0238	0.0000	128.3389
Total	**0.0982**	**0.7886**	**0.8672**	**1.5400e-003**		**0.0331**	**0.0331**		**0.0317**	**0.0317**	**0.0000**	**127.7441**	**127.7441**	**0.0238**	**0.0000**	**128.3389**

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0500e-003	0.1242	0.0391	5.4000e-004	0.0177	7.5000e-004	0.0184	5.1200e-003	7.2000e-004	5.8300e-003	0.0000	51.5126	51.5126	1.5000e-004	7.7900e-003	53.8380
Worker	0.0166	0.0107	0.1460	4.4000e-004	0.0541	2.6000e-004	0.0544	0.0144	2.4000e-004	0.0146	0.0000	40.7996	40.7996	1.1300e-003	1.1000e-003	41.1551
Total	**0.0196**	**0.1348**	**0.1851**	**9.8000e-004**	**0.0718**	**1.0100e-003**	**0.0728**	**0.0195**	**9.6000e-004**	**0.0205**	**0.0000**	**92.3122**	**92.3122**	**1.2800e-003**	**8.8900e-003**	**94.9931**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0557	0.3076	0.9493	1.5400e-003		0.0104	0.0104		0.0104	0.0104	0.0000	127.7439	127.7439	0.0238	0.0000	128.3387
Total	**0.0557**	**0.3076**	**0.9493**	**1.5400e-003**		**0.0104**	**0.0104**		**0.0104**	**0.0104**	**0.0000**	**127.7439**	**127.7439**	**0.0238**	**0.0000**	**128.3387**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0500e-003	0.1242	0.0391	5.4000e-004	0.0177	7.5000e-004	0.0184	5.1200e-003	7.2000e-004	5.8300e-003	0.0000	51.5126	51.5126	1.5000e-004	7.7900e-003	53.8380
Worker	0.0166	0.0107	0.1460	4.4000e-004	0.0541	2.6000e-004	0.0544	0.0144	2.4000e-004	0.0146	0.0000	40.7996	40.7996	1.1300e-003	1.1000e-003	41.1551
Total	**0.0196**	**0.1348**	**0.1851**	**9.8000e-004**	**0.0718**	**1.0100e-003**	**0.0728**	**0.0195**	**9.6000e-004**	**0.0205**	**0.0000**	**92.3122**	**92.3122**	**1.2800e-003**	**8.8900e-003**	**94.9931**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	141.4892	141.4892	0.0229	2.7700e-003	142.8883
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	141.4892	141.4892	0.0229	2.7700e-003	142.8883
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	1.52922e+006	141.4892	0.0229	2.7700e-003	142.8883
Total		**141.4892**	**0.0229**	**2.7700e-003**	**142.8883**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	1.52922e+006	141.4892	0.0229	2.7700e-003	142.8883
Total		**141.4892**	**0.0229**	**2.7700e-003**	**142.8883**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1522	2.0000e-005	2.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6600e-003	4.6600e-003	1.0000e-005	0.0000	4.9700e-003
Unmitigated	0.1522	2.0000e-005	2.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6600e-003	4.6600e-003	1.0000e-005	0.0000	4.9700e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0169					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6600e-003	4.6600e-003	1.0000e-005	0.0000	4.9700e-003
Total	**0.1522**	**2.0000e-005**	**2.3900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.6600e-003**	**4.6600e-003**	**1.0000e-005**	**0.0000**	**4.9700e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0169					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6600e-003	4.6600e-003	1.0000e-005	0.0000	4.9700e-003
Total	**0.1522**	**2.0000e-005**	**2.3900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.6600e-003**	**4.6600e-003**	**1.0000e-005**	**0.0000**	**4.9700e-003**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Kaiser Bed Tower Project - Parking Garage

Placer-Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	260.96	1000sqft	2.85	260,959.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Bed Tower Project. Placer County.

Land Use - Project includes 260,897 SF parking garage.

Construction Phase - Project construction would begin January 2023 with buildout in June 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per applicant.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per applicant.

Trips and VMT - Default trips assumed.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition -

Grading - Cut: 4,015 CY, Fill: 4,116 CY

Architectural Coating -

Construction Off-road Equipment Mitigation - Water twice daily. Use of Tier 4 equipment.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	0	141800
tblAreaCoating	Area_Nonresidential_Interior	0	425400
tblAreaCoating	Area_Parking	15658	15654
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	298.00
tblConstructionPhase	NumDays	6.00	40.00
tblConstructionPhase	NumDays	3.00	37.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblEnergyUse	T24E	3.50	3.92
tblFleetMix	HHD	0.01	0.00
tblFleetMix	LDA	0.47	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.8760e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	4.6960e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	5.4200e-004	0.00
tblFleetMix	SBUS	9.3000e-004	0.00
tblFleetMix	UBUS	4.4900e-004	0.00
tblGrading	MaterialImported	0.00	101.00
tblLandUse	LandUseSquareFeet	260,960.00	260,959.00
tblLandUse	LotAcreage	5.99	2.85
tblTripsAndVMT	VendorTripNumber	43.00	44.00
tblTripsAndVMT	WorkerTripNumber	110.00	112.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.8301	29.5821	19.7622	0.0486	8.8847	1.1769	10.0616	3.6526	1.0851	4.7377	0.0000	4,678.0966	4,678.0966	1.4289	0.1617	4,716.0946
2024	1.9547	14.8983	17.3810	0.0416	1.2182	0.5544	1.7726	0.3299	0.5308	0.8606	0.0000	4,005.8507	4,005.8507	0.4478	0.1577	4,064.0264
Maximum	**2.8301**	**29.5821**	**19.7622**	**0.0486**	**8.8847**	**1.1769**	**10.0616**	**3.6526**	**1.0851**	**4.7377**	**0.0000**	**4,678.0966**	**4,678.0966**	**1.4289**	**0.1617**	**4,716.0946**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.3423	7.2257	24.0430	0.0486	8.8847	0.2084	8.9891	3.6526	0.2075	3.7569	0.0000	4,678.0966	4,678.0966	1.4289	0.1617	4,716.0946
2024	1.2632	7.0756	18.7169	0.0416	1.2182	0.1852	1.4033	0.3299	0.1843	0.5142	0.0000	4,005.8507	4,005.8507	0.4478	0.1577	4,064.0264
Maximum	**1.3423**	**7.2257**	**24.0430**	**0.0486**	**8.8847**	**0.2084**	**8.9891**	**3.6526**	**0.2075**	**3.7569**	**0.0000**	**4,678.0966**	**4,678.0966**	**1.4289**	**0.1617**	**4,716.0946**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**45.55**	**67.85**	**-15.12**	**0.00**	**0.00**	**77.27**	**12.18**	**0.00**	**75.75**	**23.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**	**0.0000**	**0.0608**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**	**0.0000**	**0.0608**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/26/2023	3/17/2023	5	37	
2	Grading	Grading	3/6/2023	4/28/2023	5	40	
3	Building Construction	Building Construction	5/1/2023	6/19/2024	5	298	

Acres of Grading (Site Preparation Phase): 55.5

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 40

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Plate Compactors	3	8.00	8	0.43
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	112.00	44.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.4230	15.0341	10.4135	0.0260		0.5712	0.5712		0.5278	0.5278		2,478.3016	2,478.3016	0.7788		2,497.7720
Total	**1.4230**	**15.0341**	**10.4135**	**0.0260**	**1.5908**	**0.5712**	**2.1619**	**0.1718**	**0.5278**	**0.6996**		**2,478.3016**	**2,478.3016**	**0.7788**		**2,497.7720**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0440	0.0230	0.3812	1.0900e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		109.9393	109.9393	2.7500e-003	2.6100e-003	110.7853
Total	**0.0440**	**0.0230**	**0.3812**	**1.0900e-003**	**0.1232**	**5.9000e-004**	**0.1238**	**0.0327**	**5.4000e-004**	**0.0332**		**109.9393**	**109.9393**	**2.7500e-003**	**2.6100e-003**	**110.7853**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	0.4211	2.0573	12.4909	0.0260		0.0694	0.0694		0.0694	0.0694	0.0000	2,478.3016	2,478.3016	0.7788		2,497.7720
Total	**0.4211**	**2.0573**	**12.4909**	**0.0260**	**1.5908**	**0.0694**	**1.6602**	**0.1718**	**0.0694**	**0.2412**	**0.0000**	**2,478.3016**	**2,478.3016**	**0.7788**		**2,497.7720**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0440	0.0230	0.3812	1.0900e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		109.9393	109.9393	2.7500e-003	2.6100e-003	110.7853
Total	**0.0440**	**0.0230**	**0.3812**	**1.0900e-003**	**0.1232**	**5.9000e-004**	**0.1238**	**0.0327**	**5.4000e-004**	**0.0332**		**109.9393**	**109.9393**	**2.7500e-003**	**2.6100e-003**	**110.7853**

CalEEMod Version: CalEEMod.2020.4.0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0829**	**0.6044**	**7.6872**	**3.4248**	**0.5560**	**3.9808**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.2000e-004	0.0421	9.7300e-003	2.0000e-004	5.6900e-003	3.9000e-004	6.0800e-003	1.5600e-003	3.7000e-004	1.9300e-003		20.9482	20.9482	4.0000e-005	3.2900e-003	21.9302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0293	0.0153	0.2541	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		73.2929	73.2929	1.8400e-003	1.7400e-003	73.8568
Total	**0.0302**	**0.0574**	**0.2638**	**9.3000e-004**	**0.0878**	**7.8000e-004**	**0.0886**	**0.0234**	**7.3000e-004**	**0.0241**		**94.2411**	**94.2411**	**1.8800e-003**	**5.0300e-003**	**95.7870**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**0.2522**	**1.0927**	**10.9071**	**0.0206**	**7.0829**	**0.0336**	**7.1165**	**3.4248**	**0.0336**	**3.4584**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.2000e-004	0.0421	9.7300e-003	2.0000e-004	5.6900e-003	3.9000e-004	6.0800e-003	1.5600e-003	3.7000e-004	1.9300e-003		20.9482	20.9482	4.0000e-005	3.2900e-003	21.9302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0293	0.0153	0.2541	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		73.2929	73.2929	1.8400e-003	1.7400e-003	73.8568
Total	**0.0302**	**0.0574**	**0.2638**	**9.3000e-004**	**0.0878**	**7.8000e-004**	**0.0886**	**0.0234**	**7.3000e-004**	**0.0241**		**94.2411**	**94.2411**	**1.8800e-003**	**5.0300e-003**	**95.7870**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0524	1.9340	0.6339	8.9100e-003	0.2982	0.0122	0.3103	0.0858	0.0117	0.0975		941.0402	941.0402	2.7600e-003	0.1422	983.4914
Worker	0.3285	0.1716	2.8460	8.1200e-003	0.9201	4.4000e-003	0.9245	0.2440	4.0500e-003	0.2481		820.8799	820.8799	0.0206	0.0195	827.1966
Total	**0.3808**	**2.1056**	**3.4799**	**0.0170**	**1.2182**	**0.0166**	**1.2348**	**0.3299**	**0.0157**	**0.3456**		**1,761.9201**	**1,761.9201**	**0.0233**	**0.1617**	**1,810.6881**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9615	5.1202	15.4788	0.0250		0.1918	0.1918		0.1918	0.1918	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**0.9615**	**5.1202**	**15.4788**	**0.0250**		**0.1918**	**0.1918**		**0.1918**	**0.1918**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0524	1.9340	0.6339	8.9100e-003	0.2982	0.0122	0.3103	0.0858	0.0117	0.0975		941.0402	941.0402	2.7600e-003	0.1422	983.4914
Worker	0.3285	0.1716	2.8460	8.1200e-003	0.9201	4.4000e-003	0.9245	0.2440	4.0500e-003	0.2481		820.8799	820.8799	0.0206	0.0195	827.1966
Total	**0.3808**	**2.1056**	**3.4799**	**0.0170**	**1.2182**	**0.0166**	**1.2348**	**0.3299**	**0.0157**	**0.3456**		**1,761.9201**	**1,761.9201**	**0.0233**	**0.1617**	**1,810.6881**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153		2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**		**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0513	1.9214	0.6249	8.7300e-003	0.2981	0.0122	0.3103	0.0858	0.0117	0.0975		922.4283	922.4283	2.6700e-003	0.1395	964.0522
Worker	0.3062	0.1535	2.6559	7.8500e-003	0.9201	4.1800e-003	0.9242	0.2440	3.8500e-003	0.2479		793.7682	793.7682	0.0186	0.0182	799.6588
Total	**0.3576**	**2.0748**	**3.2809**	**0.0166**	**1.2182**	**0.0164**	**1.2345**	**0.3299**	**0.0155**	**0.3454**		**1,716.1966**	**1,716.1966**	**0.0213**	**0.1577**	**1,763.7110**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9057	5.0008	15.4361	0.0250		0.1688	0.1688		0.1688	0.1688	0.0000	2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**0.9057**	**5.0008**	**15.4361**	**0.0250**		**0.1688**	**0.1688**		**0.1688**	**0.1688**	**0.0000**	**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0513	1.9214	0.6249	8.7300e-003	0.2981	0.0122	0.3103	0.0858	0.0117	0.0975		922.4283	922.4283	2.6700e-003	0.1395	964.0522
Worker	0.3062	0.1535	2.6559	7.8500e-003	0.9201	4.1800e-003	0.9242	0.2440	3.8500e-003	0.2479		793.7682	793.7682	0.0186	0.0182	799.6588
Total	**0.3576**	**2.0748**	**3.2809**	**0.0166**	**1.2182**	**0.0164**	**1.2345**	**0.3299**	**0.0155**	**0.3454**		**1,716.1966**	**1,716.1966**	**0.0213**	**0.1577**	**1,763.7110**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Unmitigated	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608

CalEEMod Version: CalEEMod.2020.4.0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**		**0.0608**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**		**0.0608**

CalEEMod Version: CalEEMod.2020.4.0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Kaiser Bed Tower Project - Parking Garage

Placer-Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	260.96	1000sqft	2.85	260,959.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Bed Tower Project. Placer County.

Land Use - Project includes 260,897 SF parking garage.

Construction Phase - Project construction would begin January 2023 with buildout in June 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per applicant.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated per applicant.

Trips and VMT - Default trips assumed.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition -

Grading - Cut: 4,015 CY, Fill: 4,116 CY

Architectural Coating -

Construction Off-road Equipment Mitigation - Water twice daily. Use of Tier 4 equipment.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	0	141800
tblAreaCoating	Area_Nonresidential_Interior	0	425400
tblAreaCoating	Area_Parking	15658	15654
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	298.00
tblConstructionPhase	NumDays	6.00	40.00
tblConstructionPhase	NumDays	3.00	37.00

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tblEnergyUse	T24E	3.50	3.92
tblFleetMix	HHD	0.01	0.00
tblFleetMix	LDA	0.47	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.8760e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	4.6960e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	5.4200e-004	0.00
tblFleetMix	SBUS	9.3000e-004	0.00
tblFleetMix	UBUS	4.4900e-004	0.00
tblGrading	MaterialImported	0.00	101.00
tblLandUse	LandUseSquareFeet	260,960.00	260,959.00
tblLandUse	LotAcreage	5.99	2.85
tblTripsAndVMT	VendorTripNumber	43.00	44.00
tblTripsAndVMT	WorkerTripNumber	110.00	112.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.8250	29.5947	19.7065	0.0484	8.8847	1.1769	10.0616	3.6526	1.0851	4.7377	0.0000	4,660.0355	4,660.0355	1.4297	0.1652	4,698.2591
2024	1.9300	15.0807	17.1757	0.0409	1.2182	0.5545	1.7727	0.3299	0.5308	0.8607	0.0000	3,929.7134	3,929.7134	0.4510	0.1609	3,988.9442
Maximum	**2.8250**	**29.5947**	**19.7065**	**0.0484**	**8.8847**	**1.1769**	**10.0616**	**3.6526**	**1.0851**	**4.7377**	**0.0000**	**4,660.0355**	**4,660.0355**	**1.4297**	**0.1652**	**4,698.2591**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.3158	7.4134	23.9872	0.0484	8.8847	0.2085	8.9891	3.6526	0.2076	3.7569	0.0000	4,660.0355	4,660.0355	1.4297	0.1652	4,698.2591
2024	1.2386	7.2580	18.5116	0.0409	1.2182	0.1852	1.4034	0.3299	0.1843	0.5142	0.0000	3,929.7134	3,929.7134	0.4510	0.1609	3,988.9442
Maximum	**1.3158**	**7.4134**	**23.9872**	**0.0484**	**8.8847**	**0.2085**	**8.9891**	**3.6526**	**0.2076**	**3.7569**	**0.0000**	**4,660.0355**	**4,660.0355**	**1.4297**	**0.1652**	**4,698.2591**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	46.28	67.16	-15.23	0.00	0.00	77.26	12.18	0.00	75.75	23.71	0.00	0.00	0.00	0.00	0.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**	**0.0000**	**0.0608**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**	**0.0000**	**0.0608**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/26/2023	3/17/2023	5	37	
2	Grading	Grading	3/6/2023	4/28/2023	5	40	
3	Building Construction	Building Construction	5/1/2023	6/19/2024	5	298	

Acres of Grading (Site Preparation Phase): 55.5

Acres of Grading (Grading Phase): 40

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Plate Compactors	3	8.00	8	0.43
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	112.00	44.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.4230	15.0341	10.4135	0.0260		0.5712	0.5712		0.5278	0.5278		2,478.3016	2,478.3016	0.7788		2,497.7720
Total	**1.4230**	**15.0341**	**10.4135**	**0.0260**	**1.5908**	**0.5712**	**2.1619**	**0.1718**	**0.5278**	**0.6996**		**2,478.3016**	**2,478.3016**	**0.7788**		**2,497.7720**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0409	0.0287	0.3476	9.8000e-004	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		99.0843	99.0843	3.2400e-003	3.0200e-003	100.0648
Total	**0.0409**	**0.0287**	**0.3476**	**9.8000e-004**	**0.1232**	**5.9000e-004**	**0.1238**	**0.0327**	**5.4000e-004**	**0.0332**		**99.0843**	**99.0843**	**3.2400e-003**	**3.0200e-003**	**100.0648**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	0.4211	2.0573	12.4909	0.0260		0.0694	0.0694		0.0694	0.0694	0.0000	2,478.3016	2,478.3016	0.7788		2,497.7720
Total	**0.4211**	**2.0573**	**12.4909**	**0.0260**	**1.5908**	**0.0694**	**1.6602**	**0.1718**	**0.0694**	**0.2412**	**0.0000**	**2,478.3016**	**2,478.3016**	**0.7788**		**2,497.7720**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0409	0.0287	0.3476	9.8000e-004	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		99.0843	99.0843	3.2400e-003	3.0200e-003	100.0648
Total	**0.0409**	**0.0287**	**0.3476**	**9.8000e-004**	**0.1232**	**5.9000e-004**	**0.1238**	**0.0327**	**5.4000e-004**	**0.0332**		**99.0843**	**99.0843**	**3.2400e-003**	**3.0200e-003**	**100.0648**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0829**	**0.6044**	**7.6872**	**3.4248**	**0.5560**	**3.9808**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.6000e-004	0.0452	9.9300e-003	2.0000e-004	5.6900e-003	3.9000e-004	6.0800e-003	1.5600e-003	3.7000e-004	1.9300e-003		20.9787	20.9787	4.0000e-005	3.3000e-003	21.9621
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0191	0.2317	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0562	66.0562	2.1600e-003	2.0100e-003	66.7099
Total	**0.0281**	**0.0643**	**0.2417**	**8.5000e-004**	**0.0878**	**7.8000e-004**	**0.0886**	**0.0234**	**7.3000e-004**	**0.0241**		**87.0349**	**87.0349**	**2.2000e-003**	**5.3100e-003**	**88.6720**

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**0.2522**	**1.0927**	**10.9071**	**0.0206**	**7.0829**	**0.0336**	**7.1165**	**3.4248**	**0.0336**	**3.4584**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.6000e-004	0.0452	9.9300e-003	2.0000e-004	5.6900e-003	3.9000e-004	6.0800e-003	1.5600e-003	3.7000e-004	1.9300e-003		20.9787	20.9787	4.0000e-005	3.3000e-003	21.9621
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0191	0.2317	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0562	66.0562	2.1600e-003	2.0100e-003	66.7099
Total	**0.0281**	**0.0643**	**0.2417**	**8.5000e-004**	**0.0878**	**7.8000e-004**	**0.0886**	**0.0234**	**7.3000e-004**	**0.0241**		**87.0349**	**87.0349**	**2.2000e-003**	**5.3100e-003**	**88.6720**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0486	2.0792	0.6571	8.9300e-003	0.2982	0.0123	0.3104	0.0858	0.0117	0.0976		943.1149	943.1149	2.5900e-003	0.1427	985.6900
Worker	0.3056	0.2140	2.5953	7.3200e-003	0.9201	4.4000e-003	0.9245	0.2440	4.0500e-003	0.2481		739.8291	739.8291	0.0242	0.0225	747.1506
Total	**0.3542**	**2.2933**	**3.2523**	**0.0163**	**1.2182**	**0.0167**	**1.2348**	**0.3299**	**0.0158**	**0.3457**		**1,682.9439**	**1,682.9439**	**0.0268**	**0.1652**	**1,732.8406**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9615	5.1202	15.4788	0.0250		0.1918	0.1918		0.1918	0.1918	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**0.9615**	**5.1202**	**15.4788**	**0.0250**		**0.1918**	**0.1918**		**0.1918**	**0.1918**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0486	2.0792	0.6571	8.9300e-003	0.2982	0.0123	0.3104	0.0858	0.0117	0.0976		943.1149	943.1149	2.5900e-003	0.1427	985.6900
Worker	0.3056	0.2140	2.5953	7.3200e-003	0.9201	4.4000e-003	0.9245	0.2440	4.0500e-003	0.2481		739.8291	739.8291	0.0242	0.0225	747.1506
Total	**0.3542**	**2.2933**	**3.2523**	**0.0163**	**1.2182**	**0.0167**	**1.2348**	**0.3299**	**0.0158**	**0.3457**		**1,682.9439**	**1,682.9439**	**0.0268**	**0.1652**	**1,732.8406**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153		2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**		**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0476	2.0660	0.6477	8.7500e-003	0.2981	0.0122	0.3104	0.0858	0.0117	0.0975		924.5046	924.5046	2.5000e-003	0.1399	966.2492
Worker	0.2853	0.1912	2.4279	7.0800e-003	0.9201	4.1800e-003	0.9242	0.2440	3.8500e-003	0.2479		715.5548	715.5548	0.0220	0.0211	722.3796
Total	**0.3329**	**2.2573**	**3.0756**	**0.0158**	**1.2182**	**0.0164**	**1.2346**	**0.3299**	**0.0156**	**0.3454**		**1,640.0593**	**1,640.0593**	**0.0245**	**0.1609**	**1,688.6288**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9057	5.0008	15.4361	0.0250		0.1688	0.1688		0.1688	0.1688	0.0000	2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**0.9057**	**5.0008**	**15.4361**	**0.0250**		**0.1688**	**0.1688**		**0.1688**	**0.1688**	**0.0000**	**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0476	2.0660	0.6477	8.7500e-003	0.2981	0.0122	0.3104	0.0858	0.0117	0.0975		924.5046	924.5046	2.5000e-003	0.1399	966.2492
Worker	0.2853	0.1912	2.4279	7.0800e-003	0.9201	4.1800e-003	0.9242	0.2440	3.8500e-003	0.2479		715.5548	715.5548	0.0220	0.0211	722.3796
Total	**0.3329**	**2.2573**	**3.0756**	**0.0158**	**1.2182**	**0.0164**	**1.2346**	**0.3299**	**0.0156**	**0.3454**		**1,640.0593**	**1,640.0593**	**0.0245**	**0.1609**	**1,688.6288**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Unmitigated	0.8350	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**		**0.0608**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0571	0.0571	1.5000e-004		0.0608
Total	**0.8350**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0571**	**0.0571**	**1.5000e-004**		**0.0608**

Appendix C-2 - Regulatory Setting

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions (EPA 2007):

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020, and directs National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, EPA published a final rule (effective December 22, 2015) establishing the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO_2 emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units, and (2) stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661–65120). The rule prescribes CO_2 emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits.

State

CARB's Regulations for the Mandatory Reporting of Greenhouse Gas Emissions

CARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that EPA promulgated in its Final Rule on Mandatory Reporting of Greenhouse Gases (40 CFR, Part 98). Specifically, Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that EPA promulgated in the Federal Register on October 30, 2009; July 12, 2010; September 22, 2010; October 28, 2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit over 10,000 MT CO_2e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MT CO_2e per year threshold are required to have their GHG emission report verified by a CARB-accredited third-party verified.

EO B-18-12

EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing state buildings for reducing grid-based energy purchases and water use.

SB 605 and SB 1383

SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state; and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for methane and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon) and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its *Short-Lived Climate Pollutant Reduction Strategy* (SLCP Reduction Strategy) in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases.

SB 1078

SB 1078 (Sher) (September 2002) established the Renewables Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EO S-14-08, and S-21-09).

SB 1368

SB 1368 (September 2006) required the California Energy Commission (CEC) to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC).

AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting, to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

EO S-14-08

EO S-14-08 (November 2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the EO directed state agencies to take appropriate actions to facilitate reaching this target. The Natural Resources Agency, through collaboration with the CEC and California Department of Fish and Wildlife was directed to lead this effort.

EO S-21-09 and SB X1-2

EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB was further directed to work with the CPUC and CEC to ensure that the regulation builds upon the RPS program and was applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB was to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB initially approved regulations to implement a Renewable Electricity Standard. However, this regulation was not finalized because of subsequent legislation (SB X1-2, Simitian, statutes of 2011) signed by Governor Brown in April 2011.

SB X1 2 expanded the RPS by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location.

SB X1-2 applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet the renewable energy goals previously listed.

Advanced Clean Trucks Regulation

EO B-16-12

EO B-16-12 (March 2012) required that state entities under the Governor's direction and control support and facilitate the rapid commercialization of zero-emission vehicles. It ordered CARB, CEC, CPUC, and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025.

On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

EO N-79-20

Governor Newsom's EO N-79-20 (September 2020) sets a course to end the sale of new internal combustion passenger vehicles by 2035. The primary mechanism to facilitate achievement of this executive specific target is the ACC II program under development that is discussed above. The EO also sets zero-emission vehicle penetration targets for medium- and heavy-duty vehicles, drayage trucks, as well as off-road vehicles and equipment.

AB 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of electric vehicle charging stations is a matter of statewide concern. The bill required electric vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric vehicle charging stations, as specified. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt this ordinance by September 30, 2017.

Other State Actions

SB 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The Natural Resources Agency adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to

implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance-based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009), and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: Agriculture, Biodiversity and Habitat, Emergency Management, Energy, Forestry, Ocean and Coastal Ecosystems and Resources, Public Health, Transportation, and Water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018b).

Amendments to the Small Off-Road Engine Regulations: Transition to Zero Emissions

On December 9, 2021, CARB approved proposed amendments to the SORE Regulations, which would require most newly manufactured small off-road engines (SORE), such as those found in leaf blowers, lawn mowers and other equipment, be zero emission starting in 2024. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-emission standards starting in 2028.

Appendix D

General Plan Consistency Memorandum
(Transportation)

FEHR PEERS

Memorandum

Date: April 20, 2022

To: Marc Stout, City of Roseville

CC: Christine Kronenberg, Dudek
Skyler Denniston & Chang Yi, Kaiser Permanente

From: Rob Hananouchi & Rod Brown, Fehr & Peers

Subject: Kaiser Roseville Medical Center Inpatient Bed Tower – Consistency with Roseville General Plan EIR Traffic Analysis

RS22-4142

This memorandum presents a review of the proposed inpatient bed tower project at the Kaiser Permanente Roseville Medical Center (KPRMC) campus, and its consistency with the vehicle miles traveled (VMT) impact analysis conducted for the *City of Roseville 2035 General Plan Update Final Environmental Impact Report* (EIR) (City of Roseville, 2020). This memorandum presents a summary of the proposed inpatient bed tower project, the growth assumptions used in the General Plan Update EIR VMT impact analysis, and the relevant conclusions from this evaluation.

Background & Methodology

Pursuant to Public Resources Code (PRC) Section 21099, and California Code of Regulations (CCR) Section 15064.3, the State of California has determined that VMT is the most appropriate measure for transportation impacts.

Section 4-9 of the City of Roseville Design Standards describes the City's requirements for VMT impact analysis to comply with State law. Section 4-9 states that "VMT impacts may be determined by screening, if a project meets any of the screening criteria" outlined in Section 4-9-A of the City's Design Standards. Section 4-9-A states that "a project may be screened from additional VMT analysis if…the VMT generated by the project is within the scope of a prior California Environmental Quality Act (CEQA) analysis and is therefore covered by a prior analysis. Prior analysis includes analysis performed for the General Plan."

This study reviews the proposed amount of development for the inpatient bed tower project at the KPRMC campus and compares it to the amount of development assumed for the KPRMC campus in the City of Roseville 2035 General Plan Update Final EIR VMT traffic modeling. Pursuant to Section 4-9-A of

the City's Design Standards, the inpatient bed tower project would qualify for screening if the General Plan Update EIR VMT impact analysis included the VMT generated by the project and thereby analyzed the project's VMT impact as part of the General Plan EIR.

Project Description

The proposed project would expand upon the existing facilities at the KPRMC campus. Specifically, the project proposes constructing the following:

- A six-story inpatient tower building that is approximately 278,000 square feet. The proposed inpatient tower would include 138 beds (108 medical beds and 30 intensive care unit (ICU) beds), six additional operating rooms, 36 additional emergency department treatment bays, and an in-patient pharmacy.
- As part of the proposed inpatient tower building, a new main lobby entrance and entry drop-off would be provided for the hospital with primary access from Rocky Ridge Drive.
- The proposed inpatient bed tower would require relocation of the northwest corner loop road on the KPRMC campus.
- A new four-level plus rooftop parking garage would provide approximately 800 new parking stalls. The parking garage would be in the northeastern corner of the KPRMC campus in area currently developed with a surface parking lot.
- A new generator yard would be built across from the existing central utility plant to house two two-megawatt emergency generators to support the new inpatient tower building.

Table 1 presents the amount of building floor area of inpatient hospital and outpatient medical office space on the KPRMC campus with and without the proposed project.

Table 1: KPRMC Building Floor Area

Land Use	Building	Existing Floor Area	With Project Floor Area
Hospital	Existing Main Hospital	350,579 BGSF	350,579 BGSF
	Women & Children's Center	194,995 BGSF	194,995 BGSF
	Proposed Inpatient Bed Tower	-	278,000 BGSF
	Hospital Sub-Total	**545,574 BGSF**	**823,574 BGSF**
Medical Office	Medical Office Building 1	110,282 BGSF	110,282 BGSF
	Medical Office Building 2	272,406 BGSF	272,406 BGSF
	Medical Office Sub-Total	**382,688 BGSF**	**382,688 BGSF**
Hospital + Medical Office Total		**928,262 BGSF**	**1,206,262 BGSF**

Notes:
BGSF = building gross square feet

Source: Kaiser Permanente, 2022.

Note that Table 1 excludes support buildings, such as the existing auxiliary building, fire pump building, and existing and proposed parking garages.

Roseville 2035 General Plan Update EIR

The City of Roseville adopted the General Plan 2035 and certified the 2035 General Plan Update Final EIR in August 2020. The land use plan identifies the KPRMC campus as Business Professional (BP), which is consistent with other medical center and professional office areas in the city.

The transportation impact analysis for the Roseville 2035 General Plan Update Final EIR used the Roseville travel forecasting model to estimate VMT for the City. The Roseville 2035 General Plan Update Final EIR explicitly states that "future projects consistent with the General Plan will not require further VMT analysis, pursuant to the tiering provisions of CEQA." Further, it states that "quantitative analysis would not be required if it can be demonstrated that a project is consistent with the General Plan and would generate VMT which is equivalent or less than what was assumed in this General Plan EIR." This is also consistent with Section 4-9-A of the City's Design Standards described in the Background & Methodology section above.

The KPRMC campus is located within its own travel analysis zone (TAZ) of the Roseville travel forecasting model. This TAZ (TAZ 256) is bounded by Lead Hill Boulevard to the north, Eureka Road to the east, Douglas Boulevard to the south, and Rocky Ridge Drive to the west, as shown in **Figure 1**.

Table 2 presents the land use inputs for TAZ 256 (i.e., the KPRMC campus) in the 2035 Roseville travel forecasting model, which was used for the Roseville 2035 General Plan Update Final EIR. Table 2 also compares these General Plan EIR land use inputs to the project's proposed gross floor area totals.

Table 2: Roseville 2035 General Plan - Traffic Model Land Use Assumptions

Land Use	Roseville 2035 General Plan EIR: Travel Forecasting Model – TAZ 256	KPRMC Campus with Proposed Project
Hospital	962,000 SF	823,574 SF
Medical Office	434,000 SF	382,688 SF
General Office	362,000 SF	-
Total	**1,758,000 SF**	**1,206,262 BGSF**

Notes:
SF = square feet
Source: *Roseville 2035 General Plan Update Final EIR*, 2020. Kaiser Permanente, 2022.

Table 2 shows land use inputs assumed for the Roseville 2035 General Plan EIR are greater than the proposed project for the KPRMC campus.

Model Trip Generation Comparison

Table 3 presents the Roseville travel forecasting model's raw daily and PM peak hour trip generation estimate for TAZ 256 using the land use assumptions used for the Roseville 2035 General Plan Update Final EIR.

Table 3: Model Trip Generation – Roseville 2035 General Plan EIR

		Daily		PM Peak Hour	
Land Use	Floor Area Input	Model Trip Rate[1]	Raw Trips	Model Trip Rate[2]	Raw Trips
Hospital	962,000 SF	17.6 trips per KSF	16,931	1.33 trips per KSF	1,279
Medical Office	434,000 SF	36.1 trips per KSF	15,667	2.72 trips per KSF	1,181
General Office	362,000 SF	17.7 trips per KSF	6,407	1.44 trips per KSF	521
Total	**1,758,000 SF**		**39,006**		**2,981**

Notes:
SF = square feet
KSF = thousand square feet
1. Daily trip rates obtained from City of Roseville Travel Demand Forecasting Model Development Report (Fehr & Peers, 2021).
2. PM peak hour trip rates obtained from City of Roseville staff via email in May 2019.
Source: Fehr & Peers, 2022.

Table 4 presents the Roseville travel forecasting model's raw daily and PM peak hour trip generation estimate for the proposed project.

Table 4: Model Trip Generation – Proposed Bed Tower Project

		Daily		PM Peak Hour	
Land Use	Floor Area Input	Model Trip Rate[1]	Raw Trips	Model Trip Rate[2]	Raw Trips
Hospital	823,574 SF	17.6 trips per KSF	14,495	1.33 trips per KSF	1,095
Medical Office	382,688 SF	36.1 trips per KSF	13,815	2.72 trips per KSF	1,041
Total	**1,206,262 BGSF**		**28,310**		**2,136**

Notes:
SF = square feet
KSF = thousand square feet
1. Daily trip rates obtained from City of Roseville Travel Demand Forecasting Model Development Report (Fehr & Peers, 2021).
2. PM peak hour trip rates obtained from City of Roseville staff via email in May 2019.
Source: Fehr & Peers, 2022.

When the total model trip generation shown in Table 3 and Table 4 are compared, the proposed project is forecast to result in 10,696 fewer daily trips than assumed in the Roseville 2035 General Plan Update Final EIR travel modeling.

Conclusions

Since Table 3 and Table 4 show the proposed project would generate fewer trips than assumed in the Roseville 2035 General Plan Update Final EIR travel modeling, it can reasonably be determined that the proposed project would generate less daily VMT than was assumed for the Roseville 2035 General Plan Update Final EIR. Therefore, pursuant to Section 4-9-A of the City's Design Standards, the inpatient bed tower project would qualify for screening from additional VMT analysis, as the VMT impact of the proposed project was considered in the VMT impact assessment disclosed in the Roseville 2035 General Plan Update Final EIR.

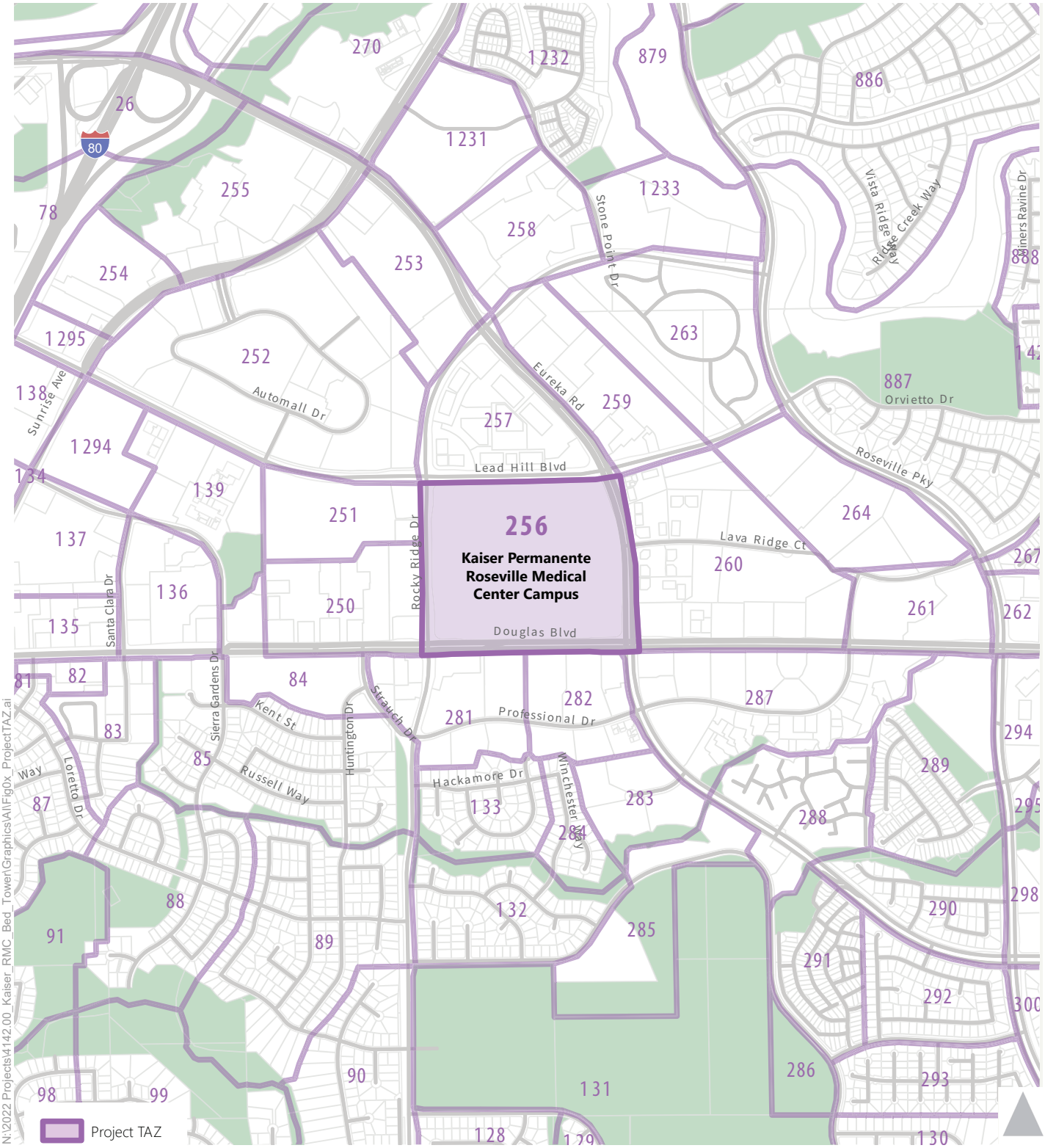

Figure 1

Project TAZ

Appendix E

Kaiser Roseville Medical Center Inpatient Bed Tower Project Water Demand Calculations

Occupancy assumptions (Hospital)		
Staff count	Daytime (16 hours)	Nighttime (8 hours)
Doctors	28	22
Nurses	49	40
Other staff	105	75
Staff FTE	**182**	**137**
Patients	354	246
Visitors	708	246
Total Occupancy	**1244**	**766**

Occupancy assumptions (Operating Rooms)	
Surgery assumptions	Operations (Daily)
Surgeries *per day per OR*	6
Doctors attending surgery	7
Nurses attending surgery	21
Total medical staff	28
Scrub washes *per day per OR*	168
Number of ORs	6
Total scrub washes	**1008**

Water consumption calculations							
#	Fixture type	Fixture water use (Gallons)		Quantity	Uses per day	Duration	Daily water use (gallons)
1	Water closet	1.28	per flush	(N/A)	3,254	N/A	4,165
2	Lavatory	0.5	per minute	(N/A)	3,354	20 seconds	559
3	Sink	1.5	per minute	(N/A)	432	20 seconds	216
4	Scrub sink	1.5	per minute	(N/A)	1,008	2 minutes	3,024
5	Shower	1.5	per minute	120	60	10 minutes	900
6	Clinical sink	6.5	per flush	12	24	N/A	1,872
7	Service sink	1.5	per minute	13	3	10 minutes	45
8	Drinking fountain	0.25	per minute	6	16	15 seconds	1
Total water use:							10,782

KP Roseville Hospital Expansion - Sterilization equipment requirements									
Product Information			Use by cycle (gal)				Water consumption		
Equipment	Make / Model	Quantity	CW	HW	PW	Steam	Water use (gallon per cycle)	Cycles per day	Water use per day (gallons)
Cart washer	WACA209	2		8		11	19	20	775
Washer disinfector	WASD233	6	10	19	10	24	63	15	5,709
Steam sterilizer (76"W)	MST 6012VS2	4	69			20	89	9	3,208
Self contained sterilizer (39"W)	MST 606VS2E	2	42		3	0	45	5	450
Steam sterilizer (Single door)	STER273-1	4	58			5	63	2	503
Total									**10,600**

Appendix F

Kaiser Permanente Roseville Medical Center
Sanitary Sewer Study

March 23, 2022
BKF No 20178129

City of Roseville
311 Vernon St.
Roseville, Ca 95678
Transmitted Electronically

Subject: Kaiser Permanente Roseville Medical Center
Sanitary Sewer Study

The sewer for the main hospital is serviced by an 8-inch line that runs west and connects downstream to the City's main 12-inch trunk line on Rocky Ridge Drive and several service lines that connect to a City 8-inch main line running through the campus within a drainage and sewer easement. Based on information provided by the City of Roseville, the existing 12-inch main on Rocky Ridge Drive has an available capacity of about 0.9 MGD (see figure 1 below for location).

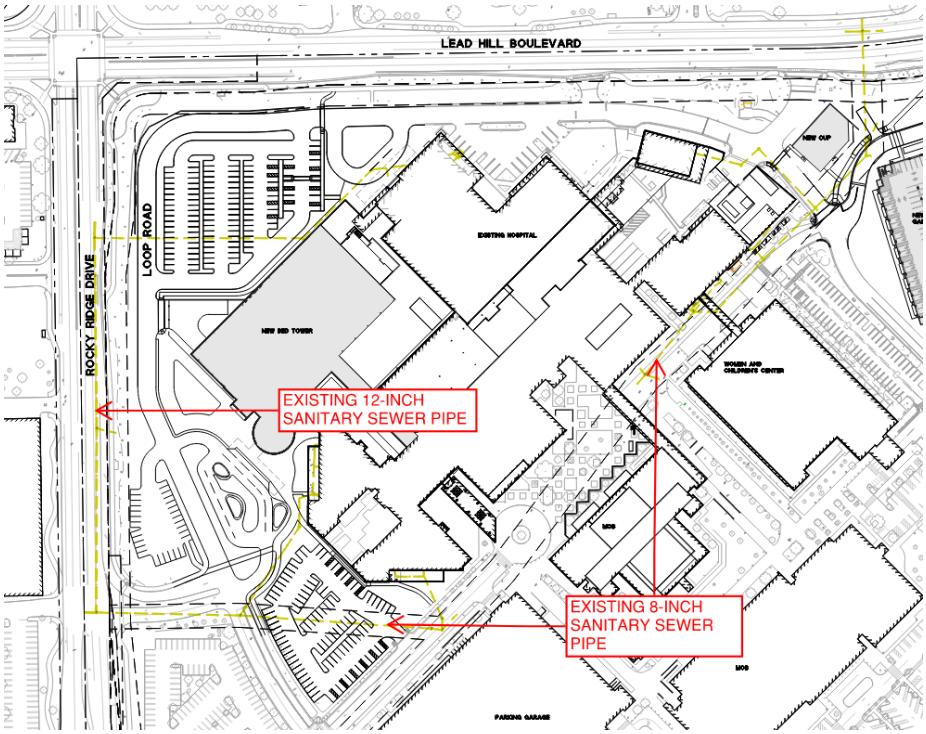

Figure 1: Existing Sewer Network

The proposed hospital development will convey sewage in a new 8-inch line that runs parallel and connects to the existing 8-inch servicing the hospital. The existing 8-inch connection to the City main on Rocky Ridge Drive will remain. The new bed tower provides an average dry weather flow (ADWF) of 69,000 gallons per day. This results in a peak wet weather flow of 496,800 gallons per day using the City of Roseville Design Standards for wastewater (see table 1 below). Per the City's sewer network model, the existing 12-inch pipe on Rocky Ridge Drive has a peak flow of 0.256 MGD downstream of the existing 8-inch connection. Adding the peak flow from the new bed tower to the existing peak flow in the system results in 0.756 MGD. Refer to Table 2 below. The capacity of a 12-inch pipe at full flow is 1.00 MGD and at 0.7 depth is 0.85 MGD per table 2 in section 9 of the City of Roseville Design Standards (see figure 2 below). Therefore, the additional peak flow from the new improvements will not exceed the capacity limits for the 12-inch main per the City of Roseville design standards.

Table 1 – Proposed Average Dry Wet Weather Flow (ADWF) and Peak Wet Weather Flow (PWWF)					
New Bed Tower ADWF (GPD)	**Safety Factor**	**Max Day Sewage Flow (GPD)**	**Peaking Factor**	**PWWF (GPD)**	**PWWF (MGD)**
69,000	2.00	138,000	3.6	496,800	0.5

Table 2 – Total New Peak Flow Added to Existing System				
New Bed Tower Peak Flow (MGD)	**Existing 12-inch Peak Flow (MGD)**	**Total Peak Flow for 12-inch (MGD)**	**Full Flow Capacity for 12-inch (MGD)**	**0.7 Depth Capacity for 12-inch (MGD)**
0.5	0.256	0.756	1.0	0.85

PIPE DIAMETER (IN)	SLOPE (ft/ft)	CAPACITY AT 0.7 DEPTH	CAPACITY FLOWING FULL
6	0.0050	0.22 MGD	
8	0.0035	0.38 MGD	
10	0.0025	0.58 MGD	
12	0.0020	0.85 MGD	1.00 MGD
15	0.0015	1.32 MGD	1.60 MGD
18	0.0012	1.95 MGD	2.35 MGD

Figure 2: Table 2 of Section 9 of the City of Roseville Design Standards

Sincerely,

BKF Engineers

Stephany Romero, PE
Project Manager

Appendix G

Kaiser Roseville Bed Tower
Storm Water Management - Hydromodification
Variance Supplemental Memorandum

SUPPLEMENTAL MEMORANDUM

Date: **March 22, 2022** **BKF Job Number: C20178129**

Deliver To: **City of Roseville**
Planning Division, Development Services

From: **BKF Engineers, Stephany Romero, P.E.**

Subject: **Kaiser Roseville Bed Tower**
Storm Water Management – Hydromodification Variance

To Whom It May Concern:

BKF Engineers has prepared this Supplemental Memorandum to provide clarity on our stormwater design intent. The project is a regulated redevelopment project subject to hydromodification management. In the existing condition, the drainage management areas on the west drain to CDS units (proprietary treatment devices) prior to connecting to the City mains. In the proposed condition, the drainage management areas will drain to proprietary devices for treatment and then drain to detention pipes for storage. We are planning to omit detention for drainage management areas that do not increase the pre-project peak runoff rate. In addition, we have designed to incorporate the existing proprietary devices for treatment in areas that do not exceed the pre-project runoff flow.

Refer to table 1 – Hydromodification Summary Table for impervious area pre- and post- project condition. DMAs 2, 4, and 5 provide similar site conditions and do not add impervious surface. The calculations in Form 4-2-Hydromodification Target for Peak Runoff of the West Placer Stormwater Quality Plan spreadsheet confirms that the post-construction peak runoff rates are less than or equal to pre-construction peak runoff rate for DMAs 2, 4 and 5. The West Placer County Storm Water Quality Design Manual, Section 4 – Requirements for Hydromodification Management Project states, "post-construction peak runoff rates (shall discharge) less than or equal to pre-construction peak runoff rate for a 2-year, 24-hr storm event." Therefore, DMAs 2, 4 and 5 will not require hydromodification.

Table 1:

HYDROMODIFICATION SUMMARY TABLE											
PRE-PROJECT CONDITION						**POST-PROJECT CONDITION**					
Drainage Management Area (DMA)	DMA 1	DMA 2	DMA 3	DMA 4	DMA 5	Drainage Management Area (DMA)	DMA 1	DMA 2	DMA 3	DMA 4	DMA 5
DMA Area (SF)	114,129	161,378	42,602	117,324	14,742	DMA Area (SF)	137,522	161,296	46,026	117,324	14,742
DMA Area (acres)	2.620	3.705	0.978	2.693	0.338	DMA Area (acres)	3.157	3.703	1.057	2.693	0.338
Pre Project Pervious Area (SF)	22,984	30,268	14,839	21,194	1,776	Post Project Pervious Area (SF)	15,853	31,825	9,085	36,197	8,441
Pre Project Impervious Area (SF)	91,145	131,110	27,763	96,130	12,966	Post Project Impervious Area (SF)	121,669	129,471	36,941	81,127	6,301
Pre Project Peak Runoff (cfs)*	5.21	7.36	1.94	5.35	0.67	Post Project Peak Runoff (cfs)	6.28	7.36	2.10	5.34	0.67

*Values taken from West Placer Stormwater Quality Plan spreadsheet form 4-2 "Hydromodification Target for Peak Runoff"

The existing Contech CDS treatment devices are used to screen, separate and trap trash, debris, sediment and hydrocarbons from stormwater runoff. Existing and proposed stormwater piping is rerouted to the existing Contech CDS treatment devices to treat the runoff before entering the city system. All DMAs will provide additional proposed treatment options to treat the additional project runoff. DMA 2 decreases the impervious area and provides the same pre- and post- project peak runoff as shown in table 1. Therefore, we are proposing that all runoff from DMA 2 will be treated by the existing Contech CDS treatment devices. In addition, Form 3-5 of the West Placer Stormwater Quality Plan spreadsheet calculates DMA 2 as required to treat 0.59 cfs of water quality flow. The existing Contech CDS treatment device can treat 1.6 cfs of runoff and achieve 80% annual solid load reduction with an average particle size distribution of 125um or larger. Therefore, no additional proprietary treatment device is required for this drainage management area.

Please contact me if you have any questions.

Sincerely,

Stephany Romero, PE
Project Manager
BKF Engineers

DUDEK

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