

Appendix A

Notice of Preparation and Comment Letters



NOTICE OF PREPARATION

Town of Moraga Comprehensive Advanced Planning Initiative EIR

Date: February 3, 2022

To: Reviewing Agencies, Interested Parties, and Organizations

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Town of Moraga's Comprehensive Advanced Planning Initiative

The Town of Moraga (Town) is preparing its Comprehensive Advanced Planning Initiative which includes an update to the Town's Housing Element, rezoning of key sites within the Town's jurisdiction, and amendments to the General Plan. The Town has determined that an Environmental Impact Report (EIR) will be necessary to evaluate environmental impacts of the Comprehensive Advanced Planning Initiative (project) pursuant to the California Environmental Quality Act (CEQA). In compliance with CEQA, the Town will be the Lead Agency and prepare the EIR. The Town is requesting comments and guidance on the scope and content of the EIR from responsible and trustee agencies, interested public agencies, organizations, and the general public (*CEQA Guidelines* Section 15082).

This Notice of Preparation (NOP) and background documents associated with the Comprehensive Advanced Planning Initiative, known as the "project" under CEQA, are available for review on the Town's Comprehensive Advanced Planning Initiative webpage at: <https://www.moraga.ca.us/493/Advanced-Planning-Initiative>. This NOP provides a summary of the project; the potential environmental issues to be analyzed in the EIR; and information on how to comment on the scope of the EIR.

Notice of Preparation Public Review Period: February 3, 2022 to March 7, 2022

The Town requests your careful review and consideration of this notice, and it invites input and comments from interested agencies, persons, and organizations regarding the preparation of the EIR. Comments and responses to this notice must be in writing and submitted to the Lead Agency Contact by **5:00 p.m. on March 7, 2022**. If applicable, please indicate a contact person for your agency or organization. If your agency is a responsible agency as defined by *CEQA Guidelines* Section 15381, your agency may use the environmental documents prepared by the Town when considering permits or approvals for action regarding the project. Please submit written comments by email or mail to the Lead Agency Contact:

Afshan Hamid, Planning Director
Town of Moraga Planning Department
329 Rheem Boulevard
Moraga, California 94556
ahamid@moraga.ca.us

For comments submitted via email, please include "Scoping Comments: Comprehensive Advanced Planning Initiative" in the subject line and the name and physical address of the commenter in the body of the email.

Public Scoping Meeting: The Town will hold a virtual scoping meeting to provide an opportunity for agency staff and interested members of the public to submit verbal comments on the scope of the environmental issues to be addressed in the EIR. The virtual scoping meeting will be held on Thursday, **February 17, 2022** at 6:00 p.m.

The link to the Zoom webinar is the following:

<https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fus02web.zoom.us%2Fj%2F88320221044&data=04%7C01%7C%7Cc52b3d45c8af47f6f3f608d9e5dad44%7C0601450f05594ee5b99257193f29a7f8%7C0%7C0%7C637793550420019502%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000∓reserved=0>

To attend the Zoom webinar by telephone, dial the following number:

+1-669-900-6933 (webinar ID: 883 2022 1044)

For more information and to register to attend the scoping meeting, go to www.makemoragahome.org. The scoping presentation will be available to view after February 17, 2022 at the same URL.

Project Background: Like all cities in the San Francisco Bay Area, the Town of Moraga is required to update the Housing Element of its General Plan to cover the 2023-2031 planning period. The Housing Element must address new state requirements, such as “affirmatively furthering fair housing” and ensuring compliance with permitting requirements in state law. The Housing Element also must demonstrate that the Town has sufficient capacity to meet Moraga’s “fair share” of the region’s housing needs, as determined by the Association of Bay Area Governments (ABAG). Through the Regional Housing Needs Allocation (RHNA) process, which is required by State law, the 2023-2031 RHNA for Moraga has been set at 1,118 housing units. This is an increase of more than 400 percent relative to the allocation for 2015-2023.

The Comprehensive Advanced Planning Initiative will serve as a cohesive long-term framework for future growth and development in the Town. The Initiative was catalyzed by the RHNA assignment, as well as Plan Bay Area 2050 and other initiatives that support denser housing in “Priority Development Areas” around the region. The Initiative is meant to ensure the Town has a sufficient number of appropriately zoned sites to meet its housing assignment. It is also intended to provide supportive housing goals, policies, programs, and quantitative objectives to meet the Town’s future housing needs. To that end, the Town is preparing its 6th Cycle Housing Element Update, which will result in a series of land use and zoning modifications.

The Town of Moraga is consolidating long range planning efforts through this initiative, namely the Housing Element Update and corresponding rezoning of the Moraga Center Specific Plan and Rheem Park Areas, rezoning of the Bollinger Canyon Study Area, and General Plan amendments to achieve internal consistency and meet recent State requirements. For example, the Town must adopt vehicle miles travelled (VMT) thresholds as required by Senate Bill 743 to determine potential impacts from future projects. The Advanced Planning Initiative will ensure a new and comprehensive vision for growth throughout the Town that meets the community’s needs.

Project Location: The Comprehensive Advanced Planning Initiative encompasses the Town of Moraga, within the County of Contra Costa, California. Most of the sites analyzed under the project would be located within the Moraga Center Specific Plan area and the Rheem Park Area about a mile to the north. Figure 1 shows the regional location and Figure 2 shows the Plan Area, which includes the Town limits and sphere of influence. The three geographic areas highlighted on Figure 3 are discussed in greater detail in the Project Description below.

Proposed Project: The scope of the environmental analysis encompasses three main components: the Town of Moraga’s Housing Element Update and the rezoning of specific urbanized parts of Moraga, rezoning of the Bollinger Canyon Study Area, and amendments to the General Plan. Due to the Town-wide influence of these documents, the Town has determined that a Program EIR will be the appropriate document to comply with CEQA. The Program EIR will analyze the respective environmental impacts associated with each of the three components.

The Comprehensive Advanced Planning Initiative represents the community's view of its future and contains the goals and policies upon which the Town Council and Planning Commission will base their future land use and resource decisions. The Initiative will identify how the Town anticipates meeting its RHNA. It will reflect changes in the community, new issues and opportunities as identified from community input, changes in State law, and new trends. The Comprehensive Advanced Planning Initiative seeks to accomplish the following objectives:

- A State-certified Housing Element for 2023-2031 that responds to local and regional needs.
- An internally-consistent, easy-to-use General Plan that is legally compliant and addresses emerging issues.
- Updated long-range planning policies and programs that respond to recent State legislation related to Vehicle Miles Traveled, climate change and resilience, fire hazards, evacuation, and other pertinent topics.
- General Plan land use and zoning designations for the Bollinger Canyon Study Area.
- Opportunities for meaningful public participation, including the engagement of residents who have not historically participated in planning processes.
- New objective development standards consistent with state law.

Housing Element Update and Urban Rezoning

The Housing Element Update will present a comprehensive set of housing policies and actions for the years 2023-2031 and will encompass the entire Town of Moraga. The Housing Element Update will be based on the Town's RHNA, plus a buffer of units to ensure ongoing compliance with the No Net Loss provisions of State housing law. Potential new opportunity sites would be identified based on a number of factors, such as existing use, adjacent uses, occupancy levels, availability for sale, floor area ratio (relative to zoning allowances), and improvement to land value ratio.

As illustrated in the attached Figure 3, rezoning would be focused in two specific geographic areas:

- Rheem Park Area - The Rheem Park area is an approximately 60-acre area located at the intersection of Rheem Boulevard and Moraga Road in north-central Moraga. It includes the Rheem Shopping Center, office buildings, a convalescent facility, miscellaneous commercial uses, and vacant land. Zoning in the area includes Suburban Office, Limited Commercial, and Community Commercial. Multi-family residential uses are not listed as a permitted use in these zoning districts. Proposed zoning changes would allow multi-family residential uses on some of these properties, at densities meeting the State "default density" requirement of at least 20 units per acre.
- Moraga Center - Moraga Center is an approximately 150-acre area generally located around the intersection of Moraga Road and Moraga Way. Land use in this area is governed by a Specific Plan adopted in 2010, as well as new zoning regulations adopted in 2020. Proposed zoning changes in this area would include increasing the maximum allowable densities on sites where multi-family uses are currently permitted, as required by State law, and making multi-family residential a permitted use in areas where it is currently not permitted. The specific sites and/or zones subject to these changes will be determined through a planning process to take place in Spring 2022.

Rezoning of Bollinger Canyon Study Area

Bollinger Canyon is identified as a "Study Area" on Moraga's General Plan and Zoning Maps. A variety of land use and zoning options will be considered to rezone the area, including the application of existing zoning districts to the site and the development of new zoning districts that do not currently exist. Revisions to the Town's transfer of development rights procedures and standards may also be considered.

General Plan Amendments

Part of the Housing Element Update and the resulting rezoning will require amendments to the General Plan as rezoning would cause changes in land use, revisions to the definitions of land use categories, and changes to the residential development potential estimates included in the Town's 2002 General Plan. Changes to land use and

zoning will likely require new policies in the Land Use, Community Design, Public Safety, Open Space and Conservation, and Circulation Elements. In addition, the Town will adopt VMT thresholds for future projects in Moraga as part of the update to the Circulation Element. Updated language for the Bollinger Canyon Study Area also will be developed.

Project Alternatives: The EIR will evaluate a reasonable range of project alternatives that, consistent with CEQA, meet most of the project objectives and reduce or avoid potential environmental effects, including a required No Project Alternative.

Potential Environmental Effect Areas: The EIR will describe the reasonably foreseeable and potentially significant adverse effects of the proposed project (both direct and indirect). The EIR also will evaluate the cumulative impacts of the project when considered in conjunction with other related past, present, and reasonably foreseeable future projects. The Town anticipates that the proposed project could result in potentially significant environmental impacts in the following topic areas, which will be further evaluated in the EIR:

- | | |
|-----------------------------------|---|
| ▪ Aesthetics/Visual | ▪ Population and Housing |
| ▪ Air Quality | ▪ Public Services and Recreation |
| ▪ Biological Resources | ▪ Transportation |
| ▪ Cultural Resources | ▪ Tribal Cultural Resources |
| ▪ Energy | ▪ Utilities and Service Systems |
| ▪ Geology and Soils | ▪ Wildfire |
| ▪ Greenhouse Gas Emissions | ▪ Less than Significant Impacts (Agriculture and Mineral Resources) |
| ▪ Hazards and Hazardous Materials | ▪ Cumulative Effects |
| ▪ Hydrology and Water Quality | ▪ Growth Inducing Effects |
| ▪ Land Use and Planning | |
| ▪ Noise | |

When the Draft EIR is completed, it will be available for review at the Town's Planning Department located at 329 Rheem Boulevard, Moraga, California 94556 and online at: www.makemoragahome.org. The Town will issue a Notice of Availability of a Draft EIR at that time to inform the public and interested agencies, groups, and individuals of how to access the Draft EIR and provide comments.

If you have questions regarding this NOP or the scoping meeting, please contact Afshan Hamid at (925) 888-7043 or via email at makemoragahome@moraga.ca.us.

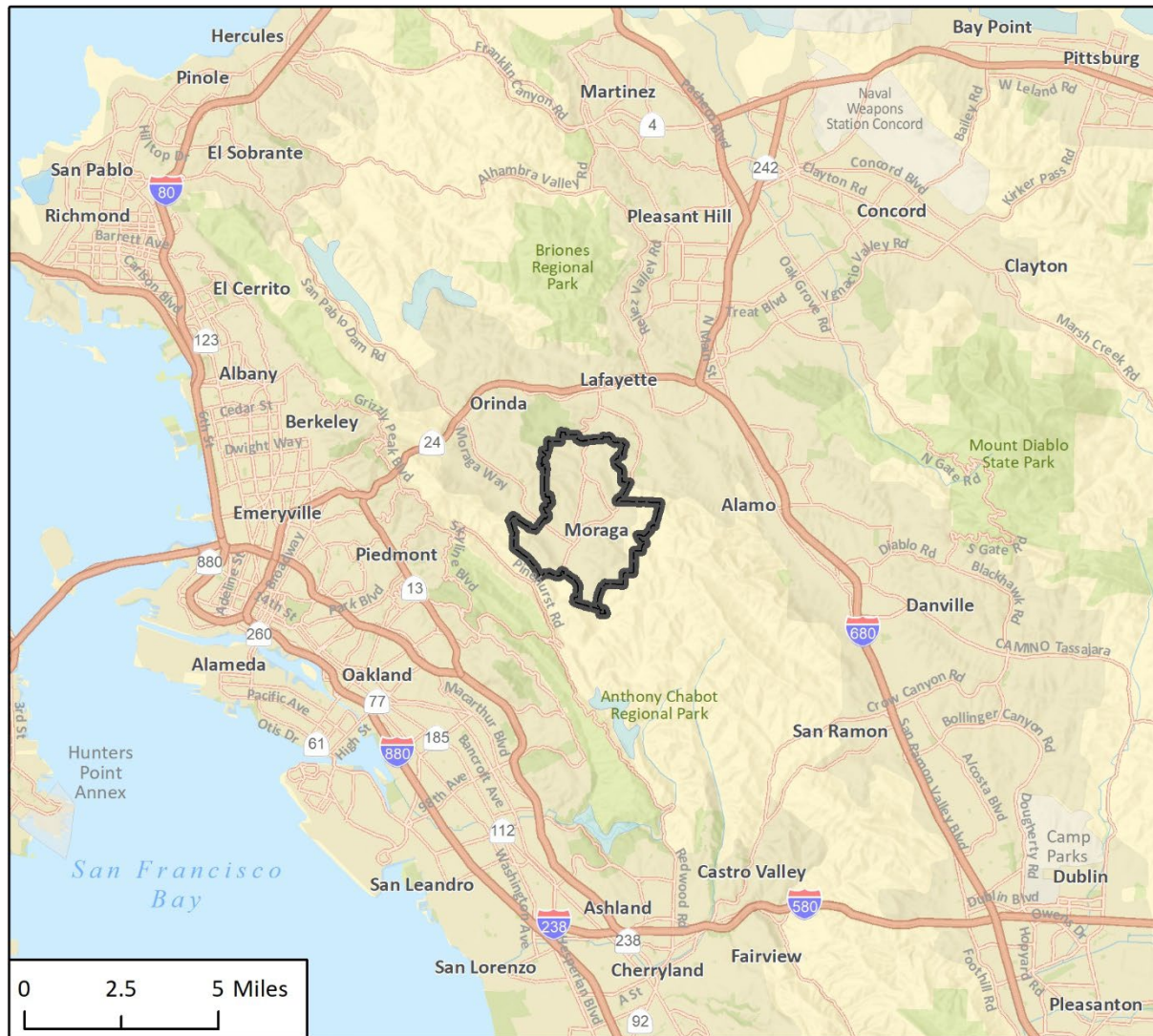


Afshan Hamid, Planning Director

February 1, 2022

Date

Figure 1 Regional Location



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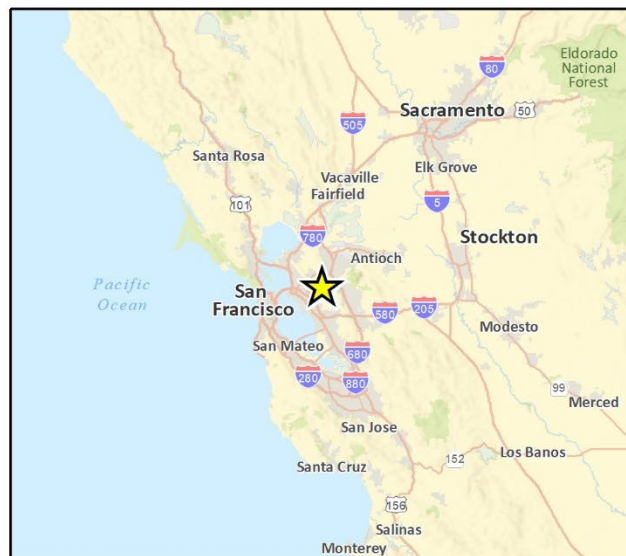


Fig. 1 Regional Location.

Figure 2 Plan Area

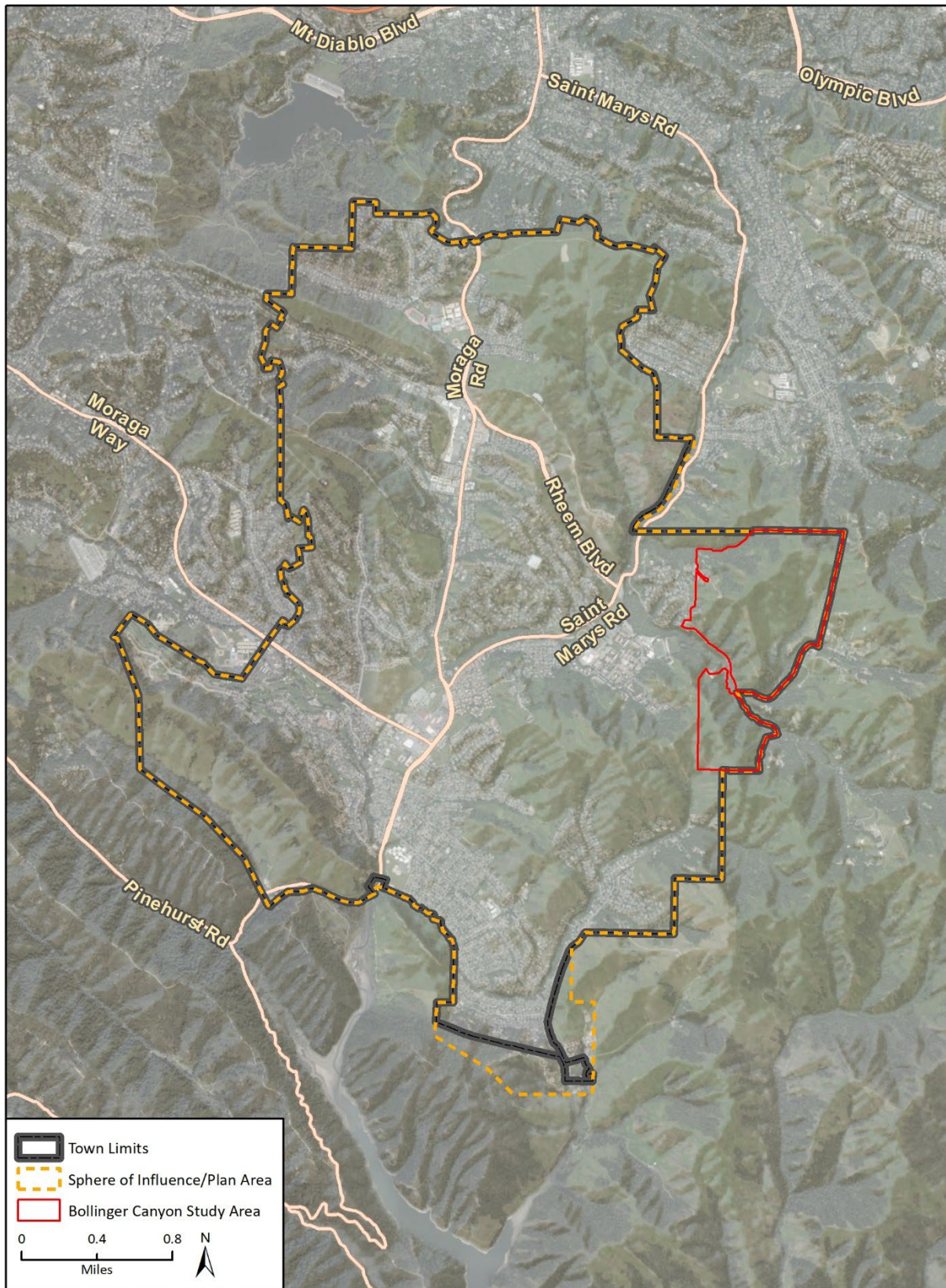
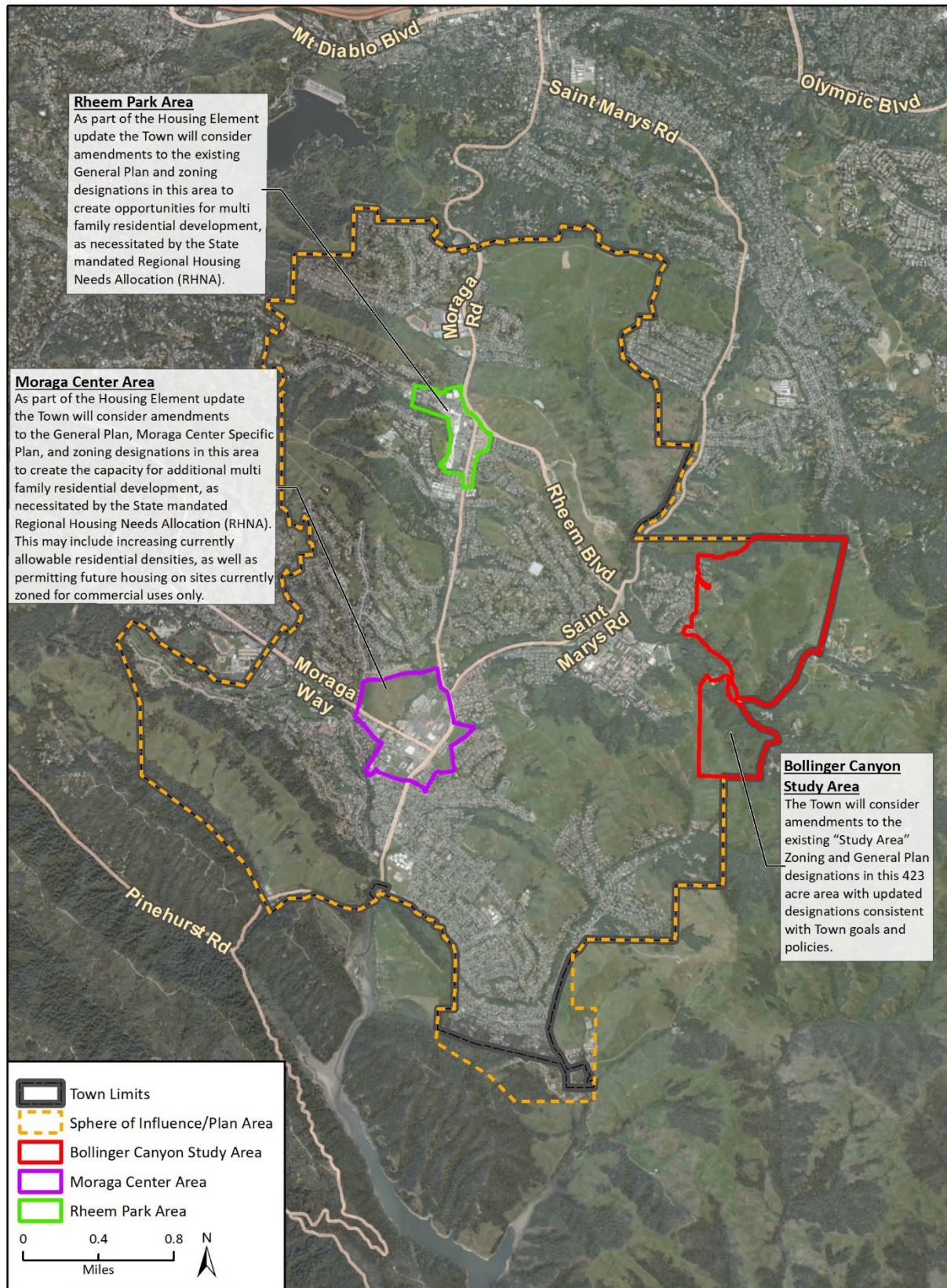


Fig 2 Plan Area

Figure 3 Study Areas





NATIVE AMERICAN HERITAGE COMMISSION

February 8, 2022

Afshan Hamid
Town of Moraga
329 Rheem Boulevard
Moraga, CA 94556

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Luiseño

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

Re: 2022020106, Town of Moraga Comprehensive Advanced Planning Initiative Project, Contra Costa County

Dear Ms. Hamid:

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.

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:
Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

February 28, 2022

Afshan Hamid, Planning Director
Town of Moraga Planning Department
329 Rheem Boulevard
Moraga, CA 94556



Re: Notice of Preparation of a Draft Environmental Impact Report for the Town of Moraga's Comprehensive Advanced Planning Initiative, Moraga

Dear Mr. Hamid:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation of a Draft Environmental Impact Report for the Town of Moraga's Comprehensive Advanced Planning Initiative, which encompasses the entirety of the Town of Moraga (Town). EBMUD has the following comments.

WATER SERVICE

Parts of the Comprehensive Advanced Planning Initiative are located outside EBMUD's current service area and would need to be annexed into EBMUD's current service area before receiving water service from EBMUD. Please note that EBMUD will not deliver water to any annexed property until a formal approval is issued by the U.S. Bureau of Reclamation. A description of the requirements pertaining to annexation is enclosed. Project sponsors for future development located outside EBMUD's current service area should contact the Contra Costa County Local Agency Formation Commission (LAFCO) to apply for annexation.

Effective January 1, 2018, water service for new multi-unit structures shall be individually metered or sub-metered in compliance with California State Senate Bill 7 (SB-7). SB-7 encourages conservation of water in multi-family residential, mixed-use multi-family and commercial buildings through metering infrastructure for each dwelling unit, including appropriate water billing safeguards for both tenants and landlords. EBMUD water services shall be conditioned for all development projects within the Housing Element Update that are subject to SB-7 requirements and will be released only after the project sponsor has satisfied all requirements and provided evidence of conformance with SB-7.

Main extensions that may be required to serve any specific developments within the Comprehensive Advanced Planning Initiative to provide adequate domestic water supply, fire flows, and system redundancy will be at the project sponsor's expense. Pipeline and fire hydrant relocations and replacements due to modifications of existing streets, and off-site pipeline improvements, also at the project sponsor's expense, may be required depending on EBMUD metering requirements and fire flow requirements set by the local

fire department. When the development plans are finalized for individual projects within the Comprehensive Advanced Planning Initiative, project sponsors for individual projects should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions of providing water service to the development. Engineering and installation of new and relocated pipelines and services require substantial lead time, which should be provided for in the project sponsor's development schedule.

Project sponsors for individual projects within the Comprehensive Advanced Planning Initiative should be aware that EBMUD will not install piping or services in contaminated soil or groundwater (if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste or that may be hazardous to the health and safety of construction and maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping or services in areas where groundwater contaminant concentrations exceed specified limits for discharge to the sanitary sewer system and sewage treatment plants. The project sponsor must submit copies to EBMUD of all known information regarding soil and groundwater quality within or adjacent to the project boundary and a legally sufficient, complete, and specific written remediation plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of contaminated soil and groundwater.

EBMUD will not design piping or services until soil and groundwater quality data and remediation plans have been received and reviewed and will not start underground work until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists, or the information supplied by the project sponsor is insufficient, EBMUD may require the project sponsor to perform sampling and analysis to characterize the soil and groundwater that may be encountered during excavation, or EBMUD may perform such sampling and analysis at the project sponsor's expense. If evidence of contamination is discovered during EBMUD work on the project site, work may be suspended until such contamination is adequately characterized and remediated to EBMUD standards.

WATER CONSERVATION

Individual projects within the Comprehensive Advanced Planning Initiative present an opportunity to incorporate water conservation measures. EBMUD requests that the Town include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). Project sponsors should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense.

Afshan Hamid, Planning Director

February 28, 2022

Page 3

If you have any questions concerning this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,



David J. Rehnstrom

Manager of Water Distribution Planning

Enclosure: Annexation to EBMUD Current Service Area Requirements

DJR:KTL:grd

sb22_037 Moraga's Comprehensive Advanced Planning Initiative NOP Response

Afshan Hamid, Planning Director
February 28, 2022
Page 4

bcc: Olujimi Yoloye
Timothy McGowan
Bill Maggiore
Dan Jones
Loriezel Joſon
Karen Lee
Chandra Johannesson
Priyanka Jain
Chron
C-1923

ANNEXATION TO EBMUD CURRENT SERVICE AREA REQUIREMENTS

Changes to EBMUD's water supply commitments, such as supplying water to lands outside EBMUD's existing customer service area, require EBMUD to seek and obtain approval from the U.S. Bureau of Reclamation (USBR), with whom EBMUD has a contract for supplemental water supply in dry years. To support its approval of any expansion of EBMUD's customer service area, USBR requires environmental documentation that extends beyond what is typically needed to meet the CEQA requirements. This documentation is required to satisfy federal environmental laws including the National Environmental Protection Act (NEPA), the Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA). EBMUD will require any developer requesting annexation to provide such documentation, which EBMUD will use to support its request for USBR's consent to the provision of water service to the annexed area. In evaluating the adequacy of this environmental documentation, USBR typically consults with other federal agencies, including the U.S. Fish and Wildlife Service. In situations where the U.S. Army Corps of Engineers (Corps), in fulfilling its obligations for issuing permits and documenting environmental impacts under the Clean Water Act, ESA, NEPA and other federal environmental laws, USBR has indicated to EBMUD that it would prefer that the Corps complete all of its requirements under these laws, after which USBR would augment the documentation only as necessary to fulfill its own requirements to support the expansion of EBMUD's customer service area.

Since documentation that fulfills CEQA requirements is generally also sufficient to meet the majority of NEPA requirements, it is advisable when undertaking work to satisfy CEQA to also be cognizant of the parallel NEPA requirements as well as those NEPA requirements that go beyond CEQA requirements. Early discussions with EBMUD in this regard are highly recommended.

Because the NHPA Section 106 requirements are generally less well understood than other environmental requirements under USBR's purview, guidelines have been issued for conducting studies and preparing documentation to address these requirements. In particular, USBR requires a stand-alone report addressing Section 106 requirements. EBMUD will review the developers' Section 106 report and submit it for USBR's approval. Once satisfied with the Section 106 report, USBR may forward it to the State Historic Preservation Officer for approval.

It is important to note that EBMUD's Central Valley Project water supply contract requires payment of USBR's costs incurred to review the relevant documentation supporting any annexation request and to fulfill its own documentation responsibilities under the applicable federal laws. EBMUD requires the developer of any proposed annexation to reimburse EBMUD for these costs. Once a developer approaches EBMUD for annexation approval, EBMUD will require the developer to enter into an agreement (or separate agreements, if necessary) to advance sufficient funds for any related studies or work,

including CEQA documentation if necessary, as well as the USBR costs that will be charged to EBMUD.

Charges and agreements related to the installation of water delivery facilities and connections are subject to EBMUD's Regulations Governing Water Service to Customers of EBMUD.

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D | OAKLAND, CA 94623-0660
www.dot.ca.gov



March 2, 2022

SCH #: 2022020106
GTS #: 04-CC-2022-00528
GTS ID: 25508
Co/Rt/Pm: CC/24/5.44

Afshan Hamid, Director
Planning Department
Town of Moraga
329 Rheem Boulevard
Moraga, CA 94556

Re: Town of Moraga Comprehensive Advanced Planning Initiative Notice of Preparation (NOP)

Dear Afshan Hamid:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Town of Moraga Comprehensive Advanced Planning Initiative Project (Plan). We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the February 2022 NOP.

Project Understanding

The Plan will serve as a cohesive long-term framework for future growth and development in the Town of Moraga (Town). The Plan includes an update to the Town's Housing Element, rezoning of key sites within the Town's jurisdiction, and amendments to the General Plan. In addition, the Town will prepare a Draft Environmental Impact Report (DEIR) for the Plan which will describe the reasonably foreseeable and potentially significant adverse effects of the proposed project. The Housing Element will address new state requirements and demonstrate that the Town has sufficient capacity to meet the Regional Housing Needs Assessment (RHNA) allocation. The project encompasses the entire Town and is located south of State Route (SR)-24.

Travel Demand Analysis

With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and

multimodal improvements. For more information on how Caltrans assesses Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide ([link](#)). Please note that current and future land use projects proposed near and adjacent to the State Transportation Network (STN) may be assessed, in part, through the TISG.

Additionally, Caltrans requests the Town determine that the Town of Moraga's Comprehensive Advanced Planning Initiative is consistent with California Government Code Section 65088-65089.10 Congestion Management.

The Town is requested to gain a determination of conformity from the Contra Costa Transportation Authority to determine that the Town of Moraga's Comprehensive Advanced Planning Initiative is consistent with and conforms to the Regional Transportation Plan Consistency Requirements of the County's Congestion Management Plan (CMP).

Transportation Impact Fees

We encourage a sufficient allocation of fair share contributions toward multimodal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. We also strongly support measures to increase sustainable mode shares, thereby reducing VMT. Caltrans welcomes the opportunity to work with the Town and local partners to secure the funding for needed mitigation. Traffic mitigation- or cooperative agreements are examples of such measures.

Equitable Access

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Afshan Hamid, Director
March 2, 2022
Page 3

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Mark Leong". The signature is fluid and cursive, with a long horizontal stroke at the end.

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

DAVID R. BRUZZONE
PO BOX 97 • MORAGA, CA • 94556
PHONE: 925-376-1921

March 7, 2022

SENT VIA EMAIL

Afshan Hamid, Planning Director
Town of Moraga Planning Department
329 Rheem Boulevard
Moraga, California 94556
ahamid@moraga.ca.us

Re: DEIR Scoping Comments: Comprehensive Advanced Planning Initiative (API) and other comments pertaining GP and HE and Bollinger Valley changes.

Dear Ms Hamid:

Traffic and Circulation, Safety, housing, Open Space

The attached map (above) shows a draft map provided by Fire Marshal Chris Bachman from CCCFPD (or ConFire). It shows parts of the Lafayette/Moraga border which is also the border shared by MOFD and CCCFPD and is a basis for a CalFire Grant application which identifies areas of access (existing roads and well as Fire Trails) and fire fuel mitigation measures and other proposed fire safety improvements near our Bollinger Valley property. I've provided some identification notes on the map which shows the Town's border and Bruzzone property on both sides of the border, including the Munger parcel, which has a current Moraga land use designation of 1 dwelling unit per acre (similar to the adjacent Bluffs project). This grant application also "piggy-backs" and follows on MOFD's successful efforts to obtain a similar Grant with CalFire.

MOFD and ConFire's cooperative efforts with us and other landowners is an example of what real cooperation can be, especially one dealing with safety (fire), traffic, access and circulation, housing and other important issues. These issues don't stop at the "border".

I bring this up as it pertains to the Bruzzone's Bollinger Valley (BV) property and Moraga's GP which states, "is one of the few remaining areas of development potential in the Town" and that the Town should, "coordinate with property owners to support their effort in preparing a special study...". The map shows existing roads, St. Marys Road, Driftwood Drive, Joseph Dr., Valley Hill Drive, Cattle Chute Road, Hunsaker Canyon Rd all from which spring, fire trails. Our BV project also proposed another connection just south of Cattle Chute Road near the Lafayette/Moraga Border. Changing any of these fires trails into actual roads, to allow access and water service to our centrally located properties, would vastly increase fire safety, increase response times while mitigating dangerous dead ends (like Joseph Drive and Valley Hill Drive).

Extension of Joseph, even if only for utilities and EVA purposes, dramatically opens up alternate access to the Bluffs, Valley Hill Drive and the remote elements of Bollinger Canyon and Hunsaker Canyon Road. This would correct an egregious planning mistake by the Town in the 1970's. Other access roads to St. Marys Road, whether on the Moraga or Lafayette side of the border creates additional connection(s), a requisite condition of Moraga's GP policy for the "Study" designation and determination. This alternate access point was provided in the BV project application.

Providing an improper land use density to BV will preclude development of BV and the Munger parcels, as well as the homes on Lafayette's side. The economics of what few possible remaining lots could not justify the costs to bring in infrastructure and roads. Clearly this will then preclude development of Bruzzone's "Munger parcel" and others.

Our BV application proposed a very high percentage of the project area as open space.

Housing, Aesthetics

GP and Housing Element (HE) changes are purposely undercounting above moderate (>M) housing units by not giving appropriate LU density to BV. The Town is not proactively advancing our ability to accommodate affordable ADUs within the larger valley properties - BV and Indian Valley with Junior ADUs which could easily comply

with a very low and low affordable housing designation if included in those developments. The Town's failure to propose or advance these homes and ADUs ignores the requirement to spread the units across the town and will force the further concentration of these units into our central core.

Traffic and Circulation

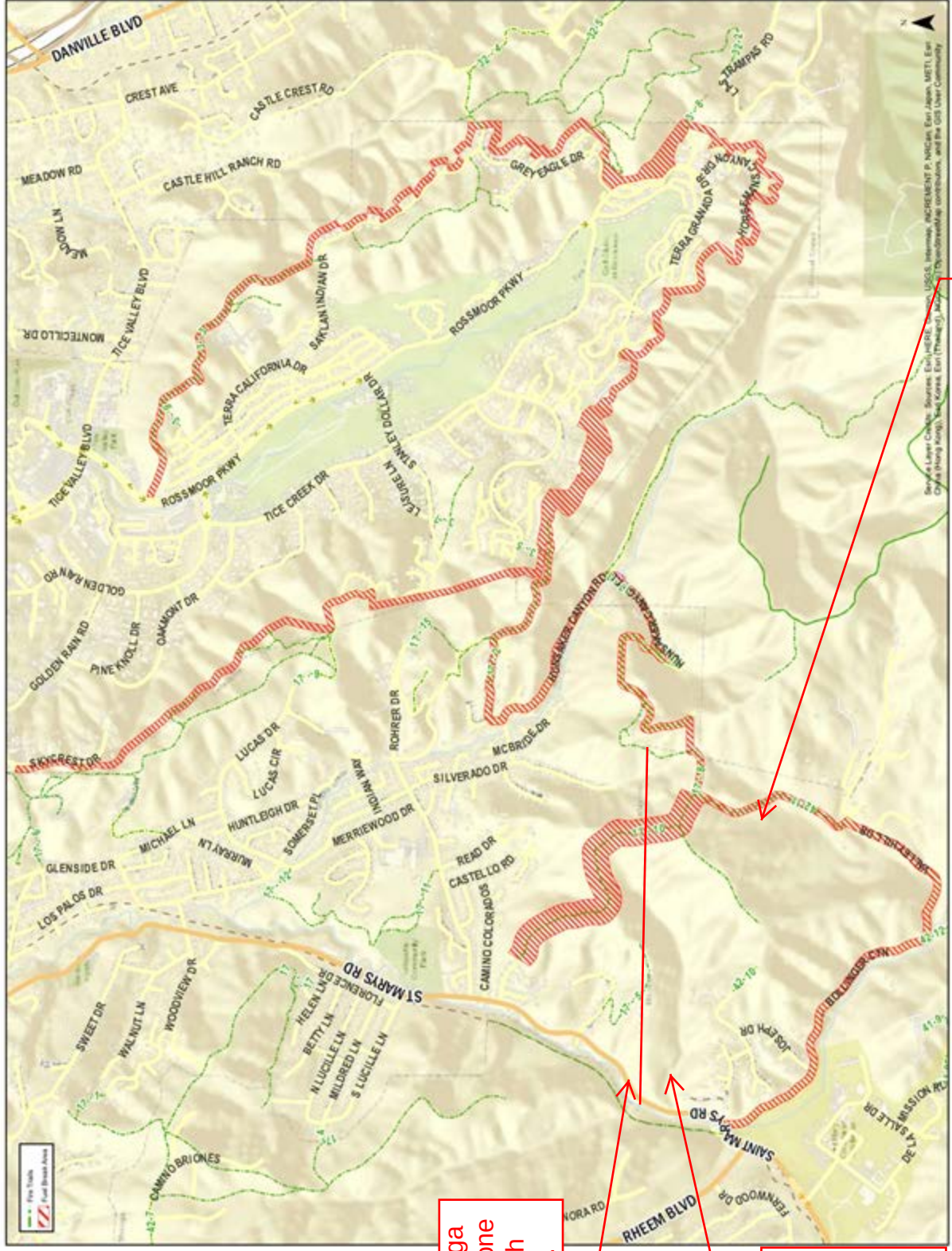
Advanced Planning Initiative (API) DEIR should evaluate, and restudy the MCSP EIR to confirm that it complies with and is consistent with the new VMT traffic and circulation standards. The recent MCSP-IP process, approved around November 2020, stated that any updating of EIR wasn't necessary. The new API DEIR should verify and confirm that is the case.

Sincerely,

David Bruzzone

Attachment - Map

Discussion of Draft fire break areas for Cal Fire Grant application CCCFPD on Bruzzone property Lafayette/Moraga Border. 2/2/2022 with Fire Marshal Chris Bachman



Lafayette/Moraga Border. Bruzzone property on both sides of border.

Bruzzone's "Munger Property", adjacent to Bluff development. Land Use is 1 DU per acre.

Bruzzone's BV property

Appendix B

Housing Opportunity Sites

APPENDIX B:

HOUSING OPPORTUNITY SITE INVENTORY



Overview of Appendix Contents

This Appendix provides an inventory of Moraga’s 2023-2031 Housing Opportunity Sites, including information required by the State of California for each site. A narrative summary of this information is contained in Chapter 4 of the Housing Element. This appendix presents the following information for each site:

Column	Title	Description
1	ID	A unique alpha-numeric ID has been assigned to each site. The letter corresponds to the site typology as follows: (A) = Entitled (already approved) project; (B) = Vacant sites zoned for low density development; (C) Vacant sites zoned for medium density development; (D) Vacant sites zoned for high density development; (E) Vacant sites zoned for mixed use development; (F) Non-vacant sites zoned for mixed use development. The number simply distinguishes each site in each lettered category.
2	APN	Assessor Parcel Number. Some sites have multiple APNs and some sites occupy only a portion of a given APN. These are noted in the “Comments” column in each table.
3	Address/Location	Either a street address or a narrative description of the location of each property
4	Acres	Total (gross) acres of the housing opportunity site
5	GP Des	Existing General Plan Designation
6	Zoning	Existing Zoning Designation. In a few cases, an asterisk is used to indicate a proposed zoning change (this is documented in footnotes)
7	Existing Use	A narrative description of the current use of each site
8	Units per Acre	Number of units per acre permitted based on the General Plan designation and/or zoning of the site. In Tables B-4, B-5, and B-6, the current maximum units per acre is cited, followed by the proposed maximum units per acre (including zoning changes). For instance “20/24” means the current zoning allows 20 Dwelling Units/ Acre (DUA) while the new zoning will allow 24 DUA.
9	Theoretical Capacity	The land area for each site multiplied by the maximum zoning density, inclusive of any proposed increases in allowable density. For already approved projects, the actual number of approved units is used.
10	Realistic Capacity	(1) For already approved projects, the actual number of approved units is used (2) For sites with development constraints such as steep slopes and limited access, the estimate is generally 60-80 percent of what is allowed by zoning. This accounts for areas likely to be dedicated as open space, as well as the possibility of larger lots than the zoning minimum. (3) Most of the multi-family and mixed use sites have a minimum density as well as a maximum density. In most cases, the minimum density was used to estimate capacity. For sites with no constraints, the number of units was presumed to be 80 percent of theoretical capacity. The estimate of a site’s “realistic capacity” does not preclude a site from developing with more units than are shown in this column. This is intended as a conservative estimate based on guidance provided by the State Department of Housing and Community Development.

Column	Title	Description
11	Income Distribution	Indicates whether the site is expected to serve above moderate, moderate, or lower (low + very low) income households. As noted in Chapter 5, the designation of a site as “lower income” does not mandate that it be developed with lower income housing. However, if it is developed with another use, the City must find that it still has capacity to meet its lower income assignment in the remaining sites (or identify additional opportunity sites to make up the deficit).
12	Pub/Private	Indicates whether the site is publicly or privately owned. PR = private. PU = public
13	Constraints	Indicates development constraints on each site, with an emphasis on environmental constraints. Listed constraints include slopes over 20 % (such projects require Hillside Development Permits), biological resources (including sensitive natural communities such as oak woodlands), creek setbacks (a 50’ setback along Laguna Creek impacts several of the sites), power lines, location in a very high fire hazard severity zone, location in the 100-year flood plain, and similar factors. In many cases (such as flood plain), these constraints only affect a small portion of the site and do not affect its realistic capacity. The 500-year FEMA flood plain and “High” fire hazard areas are not listed, as these are less constraining than the 100-year flood and “Very High” fire hazard designations.
14	Infrastructure	Indicates the improvements that would be required for site development, including road access and internal streets and utilities. Sites with utilities available in the street right-of-way abutting the site are considered to have infrastructure. Sites without adjacent water, sewer, or dry utilities are noted as needing infrastructure. This is not intended as an evaluation of the town-wide availability of water supply or sewer/drainage capacity, nor does it consider the need for maintenance or replacement of town-wide infrastructure.
15	Counted Before?	Indicates if the site was counted in the 2015-2023 Housing Element site inventory
16	Comments	Provides additional remarks and comments about each site, including background information and context for why it is listed as a housing opportunity.

The location of the sites listed in Tables B-1 through B-6 is shown in Chapter 5 of the Housing Element. Site ID numbers are shown on the maps.

Table B-1: Entitled Development Projects (2023-2031)

Site Features							Capacity Factors										Comments
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environ-mental Constraints	Infrastructure	Counted Before?	
										Low	Moderate	Above Mod					
A1	256-490-001 to -037; 256-500-001 to -058; 256-510-001 to -016; 256-520-001 to -018	Palos Colorados (e/side Moraga Rd just south of Lafayette border)	123	1 DU/AC	1 DU/AC	Vacant	1	123	123	0	0	123	Pr	Slopes over 20%	Internal roads and utilities required	Y	This is a 460-acre project, most of which is designated open space. About 123 acres are zoned 1 DU/AC. A 123-lot subdivision has been approved and recorded. The project is fully entitled, including a certified EIR.
A2	covered above	Palos Colorados ADUs	0	1 DU/AC	1 DU/AC	Vacant	NA	NA	30	0	15	15	Pr	See above	See above	Y	Palos Colorados was approved with 30 accessory dwelling units.
A3	271-360-002 to -013; 271-370-001 to -010; 271-380-001-028; 271-390-001 to -015	Country Club Drive Extension	22	3 DU/AC	3 DU/AC	Vacant	3	66	65	0	0	65	Pr	None	Completed	Y	Project is fully entitled and infrastructure is complete. Street and utilities are constructed. Grading and building permits needed for individual homes.
A4	258-600-06	Hetfield Estates	58	MOSO Open Space	MOSO Open Space	Vacant	.2	11	7	0	0	7	Pr	Slopes over 20%	Planned as part of project	Y	Project is fully entitled. Allowable capacity is being clustered, allowing most of site to be preserved as open space.
SUBTOTAL, ENTITLED PROJECTS									225	0	15	210					

Table B-2: Vacant Sites Zoned for Low Density Residential Development

Site Features								Capacity Factors									Comments
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environ-mental Constraints	Infrastructure	Counted Before?	
										Low	Moderate	Above Mod					
B1	258-160-062	Wickham-Del Rio	7.0	3 DUA	3 DUA	Vacant	3	21	10	0	0	10	Pr	Slopes over 20%	Internal roads and utilities required	Y	Total parcel is 132 acres. This is a 7-acre portion zoned for 3 DU/AC. Remainder of parcel is open space.
B2	258-160-028	End of Sanders	7.1	3 DUA	3 DUA	Vacant	3	21	10	0	0	10	Pr	Slopes over 20%	Internal roads and utilities required	Y	Moderate slope constraints, clustering possible
B3	256-210-001	E. of Campolindo HS	4.9	1 DUA	1 DUA	Vacant	1	4	4	0	0	4	Pr	Slopes over 20%	Available	Y	Recent proposal to divide into 4 units
B4	255-010-006	N. of Campolindo HS	8.2	1 DUA	1 DUA	Vacant	1	8	2	0	0	2	PU	Slopes over 20%	Available	Y	Previous element only assumed 1 unit
B5	258-250-046	8 Madsen Ct	0.25	3 DUA	3 DUA	Vacant	3	1	1	0	0	1	Pr	None	Available	N	vacant lot
B6	256-061-016	Rheem Blvd (west of Fernwood)	1.12	2 DUA	2 DUA	Vacant	2	2	1	0	0	1	Pr	None	Road access	N	Current for sale, former EBMUD
B7	256-070-032	Chalda Way West	1.11	2 DUA	2 DUA	Vacant	2	2	2	0	0	2	Pr	Slope >20%, Long narrow parcel	Available	Y	Same owner as adjacent mini-warehouse. Sloped site
B8	258-160-028 plus 258-541-007 and -008	E. end of Country Club, plus Glen Alpine	2.49	3 DUA	3 DUA	Vacant	3	7	3	0	0	3	Pr	Power lines at rear property line	Available	N	Site(s) not counted before
B9	258-470-040, 042, -044	David Drive vacant lots	4.36	1 DUA	1 DUA	Vacant	1	3	3	0	0	3	Pr	Slopes over 20%	Available	N	Three individual vacant lots, same owner

Table B-2, continued

Site Features							Capacity Factors										Comments
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environ-mental Constraints	Infrastructure	Counted Before?	
										Low	Moderate	Above Mod					
B10	256-110-043	Moraga Road, opposite Corliss	2.84	1 DUA	1 DUA	Vacant	1	2	2	0	0	2	Pr	Slope over 20%	Road access	N	Site is being advertised for sale
B11	255-381-003 and -008	Rear of 15 Ashbrook	3.34	1 DUA	1 DUA	Vacant	1	3	2	0	0	2	Pr	Slope over 20%	Road access	N	Two vacant flag lots. Driveway access from Ashbrook.
B12	258-520-003	Alta Mesa	4.26	2 DUA	2 DUA	Vacant	2	9	4	0	0	4	Pr	Slope over 20%	Available	Y	Previous element assumed 8 units.
B13	255-310-024 and 255-310- 025 (pt)	MCSP Area 4 Camino Ricardo-	7	3 DUA	3 DUA	Vacant	3	21	16	0	0	16	Pr	None	Available along Camino Ricardo	Y	In MCSP--no changes proposed. Previous Housing El. assumed 5 acres at 2 DUA or 10 unit potential. Actual zoned area is 7 ac. These units are covered by MCSP EIR
B14	257-180-034; - 037 (pt); -038 (pt); -040 (pt); -041 (pt)	Indian Valley (Canyon Rd s/w of urban area)	107	1.5 DUA		Ag	1.5	160	150	0	0	150	Pr	Very high fire severity zone, areas of slope over 20%, biological resources	Water, and sewer extension needed, plus internal roads and utilities	Y	There is an active proposal for 150 units. Site is in a very high fire severity zone. Local fire district is meeting and examining fire safety standards.

Table B-2, continued

Site Features							Capacity Factors										Comments
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environ-mental Constraints	Infrastructure	Counted Before?	
B15	237-160-037 and -073	E/side St Mary's Road s/of Lafayette border	41.6	1 DUA	1 DUA	Ag	1	41	32	0	0	32	Pr	Slopes over 20%, biological resources	Would require internal roads and utilities	Y	Site has slope and infrastructure constraints but could support clustered development. Prior Element assumed 40.
SUBTOTAL, VACANT LOW DENSITY SITES									242	0	0	242					

Table B-3: Vacant Sites Zoned for Medium Density Residential Development

Site Features							Capacity Factors										Comments
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environ-mental Constraints	Infrastructure	Counted Before?	
										Low	Moderate	Above Mod					
C1	255-471-004	Behind 2009 Ascot	2.38	6 DUA	6 DUA	Vacant	6	14	4	0	0	4	Pr	Slope over 20%, Geology	Road access	N	"Plateau" site above Rheem Ctr accessed by flag lot off Ascot. Slope and visual constraints.
C2	255-461-001	2062 Ascot	1.06	6 DUA	6 DUA	Vacant	6	6	2	0	0	2	Pr	Slope over 20%	Available	N	Steep vacant parcel with slope constraints
C3	255-183-011	1800 Donald	0.29	6 DUA	6 DUA	Vacant	6	1	1	0	0	1	Pr	Slope over 20%	Available	N	Currently listed for sale, slope constraints
C4	258-520-001	MCSP Area 16 Hillside orchard site on Moraga Rd E of shopping center	5.35	Moraga Center	12 DUA	Vacant	12	64	33	3	0	30	Pr	Slope over 20%	Available (along Moraga Rd)	N	Covered by Specific Plan, which was intended to streamline development and resulted in rezoning of this site from 3 DUA to 12 DUA. Site was not included in the 510/630 unit estimate for MCSP (in 2010) and not counted as a housing site in 2015. Site is in scenic corridor and any development would require grading, which would add to project cost and viability.

Table B-3, continued

Site Features										Capacity Factors							Comments
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environ-mental Constraints	Infrastructure	Counted Before?	
										Low	Moderate	Above Mod					
C5	258-410-012; 258-410-026	MCSP Area 15	6.37	Moraga Center	6 DUA	Vacant	6	38	36	3	0	33	Pr	None	Available	Y	Covered by Moraga Center Specific Plan, which was intended to streamline development. In 2015 Housing Element, half of this site (3.1 ac) was counted, with 12 DU assumed. At the time, the remainder was zoned Office. Site was rezoned in 2020 as 100% residential (6 DUA). A proposal for 33 SF homes was submitted.
C6	255-310-025 (pt); 255-310-026 (pt)	MSCP Area 3 (Hillside orchard west of creek)	12.4	Moraga Center	12 DUA	Vacant	12	148	124	12	0	112	Pr	Moderate slope, very small pt in flood plain, creek setback requirement on eastern edge	Internal roads and utilities will be needed	Y	Covered by Moraga Center Specific Plan, which was intended to streamline development. including zoning of this site for 12 DU/A. Site consists of portions of two parcels, one 9.7 ac and the other 2.7 ac. Total 12.4 acres. 10 units/ acre assumed as "realistic capacity" since it is the minimum density allowed by zoning. Counted in the MCSP as approximately 120 units
SUBTOTAL, VACANT MEDIUM-DENSITY SITES									200	18	0	182					

Table B-4: Vacant Sites Zoned for High Density Residential Development

Site Features							Capacity Factors									Comments	
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre (*)	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environmental Constraints	Infrastructure		Counted Before?
										Low	Moderate	Above Mod					
D1	257-500-006	MCSP Area 14	6.135	Moraga Center	R-20B	Vacant	20/24	146	122	12	110	0	Pr	None	Available	Y	Covered by Moraga Center Specific Plan, which was intended to streamline development. Zoning change will allow 24 DUA. Proposal for 123 MF units has expired. Site presumed to be available for high-density res. 122 units were assumed in prior Element
D2	255-310-026 (pt)	MCSP Area 5- "A" portion	6.1	Moraga Center	R-20A	Vacant	20/24	146	97	97	0	0	Pr	Small area in flood plain, creek setback requirement on eastern edge	Internal roads and utilities will be needed	Y	Covered by Moraga Center Specific Plan, which was intended to streamline development. Zoning change will allow 24 DUA. Realistic capacity is based on 16 DUA, since this district as a min. density standard of 16 DUA. Counted as lower income site in 2015 Element. Yield for this site plus Site D3 is consistent with MCSP (300 units)
D3	255-310-026 (pt)	MCSP Area 5 - "B" portion	12.4	Moraga Center	R-20B	Vacant	20/24	248	198	20	178	0	Pr	Moderate Slope, small area in flood plain, creek setback requirement on eastern edge	Internal roads and utilities will be needed	Y	Covered by Moraga Center Specific Plan, which was intended to streamline development. Realistic capacity based on 16 DUA, since R-20 has a min. density standard of 16 DUA. Yield for this site plus Site D2 is consistent with MCSP (300 units)
SUBTOTAL, VACANT HIGH-DENSITY SITES									417	129	288	0					

(*) Note: Existing zoning allows 20 DU/A, or 30DU/A for senior housing. Zoning change will increase allowable density to 24 DUA (additional units possible through State Density Bonus Law)

Table B-5: Vacant Sites Zoned for Mixed Use Development

Site Features							Capacity Factors										
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre (*)	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environmental Constraints	Infrastructure	Counted Before?	Comments
										Low	Moderate	Above Mod					
E1	255-321-015 (pt); 255-321-002; 255-321-016	MCSP Area 2 North end of School St on west side;	4.96	Moraga Center	MCSP-RR	Vacant, RVs stored on pt.	20/24	119	79	40	0	39	Pr	Small area in flood plain, creek setback requirement on western edge	Available but will require School Street extension	N	Covered by Moraga Center Specific Plan, which was intended to streamline development. Identified in MCSP as site for Mixed Use "Village"--including multi-family residential, retail and other commercial uses. Site is flat and vacant. Portion is used for RV storage. 16 DUA assumed based on zoning min.
E2	255-321-023 (pt); 255-321-005; 255-321-019	MSCP Area 8 North end of School St on east side.	7.71	Moraga Center	MCSP-RR	Vacant, temporary batting cages on part	20/24	185	123	62	0	61	Pr	None	Available but will require School Street extension	N	Covered by Moraga Center Specific Plan, which was intended to streamline development. Also part of the Mixed Use Village. Existing use includes batting cages and practice area in corner of site. Most of site is flat, vacant and unimproved. Includes gravel surface area on Moraga Rd. used for Xmas tree sales. 16 DUA assumed based on zoning min.

Table B-5, continued

Site Features							Capacity Factors										
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre (*)	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environmental Constraints	Infrastructure	Counted Before?	Comments
										Low	Moderate	Above Mod					
E3	255-140-052	West of Rheem Theater	1.26	Rheem Center	SO (**)	Vacant	0/ 24	30	25	25	0	0	Pr	None	Available	N	Vacant lot, has been proposed for housing in the past. Zoning change will allow 24 DUA (20 assumed)
E4	256-070-013; 256-070-028	SE corner Moraga Road and Lucas Drive	1.18	Rheem Center	LC (**)	Vacant	0/ 24	28	23	23	0	0	Pr	None	Available	N	Vacant flat parcel along Moraga Road next to 7-11. Owner has expressed in housing here. New zoning will allow up to 24 DUA
SUBTOTAL, VACANT MIXED USE SITES									250	150	0	100					

(*) Note: MCSP-RR density being increased from 20 DUA to 24 DUA as part of Housing Element adoption. Sites E3 and E4 are being rezoned to permit housing up to 24 DUA as part of Housing Element adoption.

Table B-6: Non-Vacant Sites Zoned for Mixed Use Development

Site Features							Capacity Factors										Comments
ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre (*)	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environmental Constraints	Infrastructure	Counted Before?	
										Low	Moderate	Above Mod					
F1	257-190-054; 257-190-055	MSCP Area 11 – S/ side Moraga Way b/w School Street and Viader	0.77	Moraga Center	MSCP-C	Two lots-one vacant, the other a small non-vacant bungalow used for day care	0/24	18	15	15	0	0	Pr	None	Available	N	The eastern portion of this site is a vacant unimproved lot. The western part is a day care center in a converted house. Parcels have same owner. Both parcels are to be rezoned from MCSP-C to MCSP-Mixed OR, with density of 24 DUA.
F2	255-321-021 (pt)	MCSP Area 8 Former Moraga Garden Center, 1400 Moraga Road	1.2	Moraga Center	MCSP-C	Vacant, closed plant nursery	0/24	28	24	24	0	0	Pr	None	Available	N	Covered by Moraga Center Specific Plan, which was intended to streamline development. Site was the Moraga Garden Center, now closed. It is part of a larger parcel, most of which will retain commercial zoning. The rezone of this portion will allow multi-family housing on a site where it is not allowed today.
F3	257-190-049, 257-190-050; 257-190-051; 257-190-052	Portion of MCSP Area 13 1620 School; 1600 School; 1640 School; 1660 School	2.89	Moraga Center	MCSP-OR	Non-vacant, Underutilized office	20/24	69	56	28	0	28	Pr	Small flood plain area and creek setback on western edge	Available	N	Covered by Moraga Center Specific Plan, which was intended to streamline development. Site includes four office buildings built in 1979. High vacancy, low improvement value. Parcels can be aggregated for redevelopment as multi-family. Zoning density being increased to 24 DUA. 20 DU/AC assumed as realistic capacity. High interest from property owner to redevelop with housing.

Table B-6, continued

ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre (*)	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environmental Constraints	Infrastructure	Counted Before?	Comments
										Low	Moderate	Above Mod					
F4	257-190-029	1540 School St	1.15	Moraga Center	MCSP-OR	Admin office/ Corp Yard	20/24	27	23	23	0	0	PU	None	Available	N	Owned by AT&T and used as school district offices and corporation yard. Site is underutilized. Building is in fair condition.
F5	255-140-048	346 Rheem Blvd	1.69	Rheem Center	SO	Office bldg	0/24	40	33	17	0	16	Pr	None	Available	N	16,290 SF office building for sale, being advertised as "high-density housing opportunity" site. Current FAR is 0.22 and housing is not permitted. Rezone will allow housing at 24 DUA (20 DUA assumed)
F6	255-140-046	350 Rheem Blvd	1.75	Rheem Center	SO	Former Orion Academy	0/24	42	35	18	0	17	Pr	None	Available	N	Former private school in leased 8,100 SF office building. School has relocated and building is available for sale. Current FAR is 0.1 and site is mostly parking and lawn. Rezone will allow housing at 24 DUA (20 assumed)
F7	255-030-013	380 Moraga Road	2.51	Rheem Center	SO	Admin Offices	0/24	60	50	50	0	0	Pr	Small area of flood plain on eastern edge	Available	N	Owned by St Mary's and used for admin offices and campus services. Existing FAR is 0.25. The college has expressed interest in lower income housing here, including for faculty and staff.

Table B-6, continued

ID	APN	Address/ Location	Acres	GP Des	Zoning	Existing Use	Units Per Acre (*)	Theoretical Capacity	Realistic Capacity	Income Distribution			Pub/ Private	Environmental Constraints	Infrastructure	Counted Before?	Comments
										Low	Moderate	Above Mod					
F8	255-150-019 plus buildings : (255-150-012, -014, -015, -016)	370-380 Park 422-440 Center (Rheem Shopping Ctr NE corner	4.0	Rheem Center	CC	Older retail center, with some office. Mostly non-vacant	0/24	96	80	40	0	40	Pr	None (**)	Available	N	This site includes the NE corner of the Rheem Center (Park St and Center St), including retail and offices. It does not include the area east of Center St, which is also part of parcel -019. New zoning will allow up to 24 DUA. Owner is exploring mixed use with housing options.
F9	255-160-037 and -041; plus buildings : 255-160-009, -010, -011, -012, -020	460 Center St 472 Center St 504 Center St 518 Center St 470 Moraga Rd	6.0	Rheem Center	CC	Older retail, parking, automotive, mostly non-vacant	0/24	144	120	120	0	0	Pr	None (**)	Available	N	This site includes the portion of the Rheem Shopping Center from the Post Office south to the Dollar Tree store, including the large parking lots between Center Street and Moraga Road and Rheem Valley Automotive. Current zoning does not allow housing. New zoning will allow up to 24 DUA. 18 DUA assumed.
SUBTOTAL FOR NON-VACANT MIXED USE SITES									436	335	0	101					

(*) Note: Sites F1 and F2 to be rezoned to MCSP-OR and MCSP-RR upon adoption of Element, thereby allowing 24 DU/AC. Density in MCSP-RR and MCSP-OR to be increased from 20 to 24 DU/AC upon adoption of Housing Element. Sites F5 through F9 are to be rezoned to new mixed use zoning districts allowing densities of 24 DUA as part of Housing Element adoption.

(**) Note: These two sites are currently in the "High" Fire Hazard Severity Zone, but there have been discussions by the Moraga Orinda Fire District of increasing the rating to "Very High."

Table B-7: Summary of Housing Opportunities

Site Type	Income Category			TOTAL
	Lower (Low/ Very Low)	Moderate	Above Moderate	
Entitled Projects (Development Pipeline)	0	15	210	225
Housing Opportunity Sites				
Vacant, zoned for Low Density Residential	0	0	242	242
Vacant, zoned for Medium Density Residential	0	18	182	200
Vacant, zoned for High Density Residential	129	288	0	417
Vacant, zoned for Mixed Use	150	0	100	250
Non-Vacant, zoned for Mixed Use	335	0	101	436
Accessory Dwelling Units	11	16	5	32
TOTAL	625	337	840	1,802
RHNA	501	172	445	1,118
Buffer	+124	+165	+395	+684
Percent Buffer for Lower Income Sites	25%			

Source: Barry Miller Consulting, 2022.

Appendix C

Biological Resources Special-Status Species List

Biological Resources Special Status Species Table

Scientific Name Common Name	Status	Habitat Requirements
Plants and Lichens		
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	None/None G3/S3 1B.2	Annual herb. Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Elevations: 10-1640ft. (3-500m.) Blooms Mar-Jun.
<i>Arctostaphylos auriculata</i> Mt. Diablo manzanita	None/None G2/S2 1B.3	Perennial evergreen shrub. Chaparral, cismontane woodland. In canyons and on slopes. On sandstone. Elevations: 445-2135ft. (135-650m.) Blooms Jan-Mar.
<i>Arctostaphylos manzanita</i> ssp. <i>laevigata</i> Contra Costa manzanita	None/None G5T2/S2 1B.2	Perennial evergreen shrub. Chaparral. Rocky slopes. Elevations: 1410-3610ft. (430-1100m.) Blooms Jan-Mar(Apr).
<i>Arctostaphylos pallida</i> pallid manzanita	FT/SCE G1/S1 1B.1	Perennial evergreen shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, coastal scrub. Grows on uplifted marine terraces on siliceous shale or thin chert. May require fire. Elevations: 605-1525ft. (185-465m.) Blooms Dec-Mar.
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	None/None G2T1/S1 1B.2	Annual herb. Playas, valley and foothill grassland, vernal pools. Alkaline. Elevations: 5-195ft. (1-60m.) Blooms Mar-Jun.
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	None/None G2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, valley and foothill grassland. Serpentine (sometimes). Elevations: 150-5100ft. (45-1555m.) Blooms Mar-Jun.
<i>Blepharizonia plumosa</i> big tarplant	None/None G1G2/S1S2 1B.1	Annual herb. Valley and foothill grassland. Clay (usually). Elevations: 100-1655ft. (30-505m.) Blooms Jul-Oct.
<i>Calochortus pulchellus</i> Mt. Diablo fairy-lantern	None/None G2/S2 1B.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. On wooded and brushy slopes. Elevations: 100-2755ft. (30-840m.) Blooms Apr-Jun.
<i>Campanula exigua</i> chaparral harebell	None/None G2/S2 1B.2	Annual herb. Chaparral. Rocky sites, usually on serpentine in chaparral. Elevations: 900-4100ft. (275-1250m.) Blooms May-Jun.
<i>Carex comosa</i> bristly sedge	None/None G5/S2 2B.1	Perennial rhizomatous herb. Coastal prairie, marshes and swamps, valley and foothill grassland. Lake margins, wet places; site below sea level is on a Delta Island. Elevations: 0-2050ft. (0-625m.) Blooms May-Sep.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	None/None G3T1T2/S1S2 1B.1	Annual herb. Valley and foothill grassland. Alkaline soils sometimes described as heavy white clay. Elevations: 0-755ft. (0-230m.) Blooms May-Oct(Nov).
<i>Chloropyron maritimum</i> ssp. <i>palustre</i> Point Reyes salty bird's-beak	None/None G4?T2/S2 1B.2	Annual herb (hemiparasitic). Marshes and swamps. Usually in coastal salt marsh with Salicornia, Distichlis, Jaumea, Spartina, etc. Elevations: 0-35ft. (0-10m.) Blooms Jun-Oct.
<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i> San Francisco Bay spineflower	None/None G2T1/S1 1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. Sandy. Elevations: 10-705ft. (3-215m.) Blooms Apr-Jul(Aug).
<i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower	FE/None G2T1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 10-985ft. (3-300m.) Blooms Apr-Sep.

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Scientific Name Common Name	Status	Habitat Requirements
<i>Cicuta maculata</i> var. <i>bolanderi</i> Bolander's water-hemlock	None/None G5T4T5/S2? 2B.1	Perennial herb. Marshes and swamps. In fresh or brackish water. Elevations: 0-655ft. (0-200m.) Blooms Jul-Sep.
<i>Cirsium andrewsii</i> Franciscan thistle	None/None G3/S3 1B.2	Perennial herb. Broadleafed upland forest, coastal bluff scrub, coastal prairie, coastal scrub. Mesic, serpentine (sometimes). Elevations: 0-490ft. (0-150m.) Blooms Mar-Jul.
<i>Clarkia franciscana</i> Presidio clarkia	FE/SCE G1/S1 1B.1	Annual herb. Coastal scrub, valley and foothill grassland. Serpentine outcrops in grassland or scrub. Elevations: 80-1100ft. (25-335m.) Blooms May-Jul.
<i>Cordylanthus nidularius</i> Mt. Diablo bird's-beak	None/SCR G1/S1 1B.1	Annual herb (hemiparasitic). Chaparral. Grassy or rocky areas within serpentine chaparral. Elevations: 1970-2625ft. (600-800m.) Blooms Jun-Aug.
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur	None/None G3T3/S3 1B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. Elevations: 640-3595ft. (195-1095m.) Blooms Apr-Jun.
<i>Dirca occidentalis</i> western leatherwood	None/None G2/S2 1B.2	Perennial deciduous shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. Elevations: 80-1395ft. (25-425m.) Blooms Jan-Mar(Apr).
<i>Eriastrum ertterae</i> Lime Ridge eriastrum	None/CC ! G1/S1 1B.1	Annual herb. Chaparral. Openings or edges; alkaline or semi-alkaline, sandy. Elevations: 655-950ft. (200-290m.) Blooms Jun-Jul.
<i>Eriogonum luteolum</i> var. <i>caninum</i> Tiburon buckwheat	None/None G5T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Serpentine soils; sandy to gravelly sites. Elevations: 0-2295ft. (0-700m.) Blooms May-Sep.
<i>Eriogonum truncatum</i> Mt. Diablo buckwheat	None/None G1/S1 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Dry, exposed clay or sandy substrates. Elevations: 10-1150ft. (3-350m.) Blooms Apr-Sep(Nov-Dec).
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	None/None G2/S2 1B.2	Perennial herb. Valley and foothill grassland, vernal pools. Clay. Elevations: 10-985ft. (3-300m.) Blooms Apr-Aug.
<i>Extriplex joaquinana</i> San Joaquin spearscale	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc. Elevations: 5-2740ft. (1-835m.) Blooms Apr-Oct.
<i>Fissidens pauperculus</i> minute pocket moss	None/None G3?/S2 1B.2	Moss. North coast coniferous forest. Moss growing on damp soil along the coast. In dry streambeds and on-stream banks. Elevations: 35-3360ft. (10-1024m.)
<i>Fritillaria liliacea</i> fragrant fritillary	None/None G2/S2 1B.2	Perennial bulbiferous herb. Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Often on serpentine, various soils reported though usually on clay, in grassland. Elevations: 10-1345ft. (3-410m.) Blooms Feb-Apr.
<i>Gilia capitata</i> ssp. <i>chamissonis</i> blue coast gilia	None/None G5T2/S2 1B.1	Annual herb. Coastal dunes, coastal scrub. Elevations: 5-655ft. (2-200m.) Blooms Apr-Jul.
<i>Gilia millefoliata</i> dark-eyed gilia	None/None G2/S2 1B.2	Annual herb. Coastal dunes. Elevations: 5-100ft. (2-30m.) Blooms Apr-Jul.

Scientific Name Common Name	Status	Habitat Requirements
<i>Grimmia torenii</i> Toren's grimmia	None/None G2/S2 1B.3	Moss. Chaparral, cismontane woodland, lower montane coniferous forest. Openings, rocky, boulder and rock walls, serpentine, volcanic. Elevations: 1065-3805ft. (325-1160m.)
<i>Helianthella castanea</i> Diablo helianthella	None/None G2/S2 1B.2	Perennial herb. Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Azonal soils, Partial shade (often), rocky (usually). Elevations: 195-4265ft. (60-1300m.) Blooms Mar-Jun.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> congested-headed hayfield tarplant	None/None G5T2/S2 1B.2	Annual herb. Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. Elevations: 65-1835ft. (20-560m.) Blooms Apr-Nov.
<i>Hesperolinon breweri</i> Brewer's western flax	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. Elevations: 100-3100ft. (30-945m.) Blooms May-Jul.
<i>Heteranthera dubia</i> water star-grass	None/None G5/S2 2B.2	Perennial herb (aquatic). Marshes and swamps. Alkaline, still or slow-moving water. Requires a pH of 7 or higher, usually in slightly eutrophic waters. Elevations: 100-4905ft. (30-1495m.) Blooms Jul-Oct.
<i>Hoita strobilina</i> Loma Prieta hoita	None/None G2?/S2? 1B.1	Perennial herb. Chaparral, cismontane woodland, riparian woodland. Serpentine; mesic sites. Elevations: 100-2820ft. (30-860m.) Blooms May-Jul(Aug-Oct).
<i>Holocarpha macradenia</i> Santa Cruz tarplant	FT/SCE G1/S1 1B.1	Annual herb. Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with nonnatives. Elevations: 35-720ft. (10-220m.) Blooms Jun-Oct.
<i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. Elevations: 35-655ft. (10-200m.) Blooms Apr-Sep.
<i>Isocoma arguta</i> Carquinez goldenbush	None/None G1/S1 1B.1	Perennial shrub. Valley and foothill grassland. Alkaline soils, flats, lower hills. On low benches near drainages and on tops and sides of mounds in swale habitat. Elevations: 5-65ft. (1-20m.) Blooms Aug-Dec.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE/None G1/S1 1B.1	Annual herb. Cismontane woodland, playas, valley and foothill grassland, vernal pools. Vernal pools, swales, low depressions, in open grassy areas. Elevations: 0-1540ft. (0-470m.) Blooms Mar-Jun.
<i>Layia carnosa</i> beach layia	FE/SCE G2/S2 1B.1	Annual herb. Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. Elevations: 0-195ft. (0-60m.) Blooms Mar-Jul.
<i>Leptosiphon rosaceus</i> rose leptosiphon	None/None G1/S1 1B.1	Annual herb. Coastal bluff scrub. Elevations: 0-330ft. (0-100m.) Blooms Apr-Jul.
<i>Madia radiata</i> showy golden madia	None/None G3/S3 1B.1	Annual herb. Cismontane woodland, valley and foothill grassland. Mostly on adobe clay in grassland or among shrubs. Elevations: 80-3985ft. (25-1215m.) Blooms Mar-May.
<i>Malacothamnus hallii</i> Hall's bush-mallow	None/None G2/S2 1B.2	Perennial deciduous shrub. Chaparral, coastal scrub. Some populations on serpentine. Elevations: 35-2495ft. (10-760m.) Blooms (Apr)May-Sep(Oct).

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Scientific Name Common Name	Status	Habitat Requirements
<i>Meconella oregana</i> Oregon meconella	None/None G2G3/S2 1B.1	Annual herb. Coastal prairie, coastal scrub. Open, moist places. Elevations: 820-2035ft. (250-620m.) Blooms Mar-Apr.
<i>Monolopia gracilens</i> woodland woollythreads	None/None G3/S3 1B.2	Annual herb. Broadleafed upland forest, chaparral, cismontane woodland, north coast coniferous forest, valley and foothill grassland. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. Elevations: 330-3935ft. (100-1200m.) Blooms (Feb)Mar-Jul.
<i>Navarretia gowenii</i> Lime Ridge navarretia	None/None G1/S1 1B.1	Annual herb. Chaparral. On calcium carbonate-rich soil with high clay content. Elevations: 590-1000ft. (180-305m.) Blooms May-Jun.
<i>Oenothera deltooides</i> ssp. <i>howellii</i> Antioch Dunes evening-primrose	FE/SCE G5T1/S1 1B.1	Perennial herb. Inland dunes. Remnant river bluffs and sand dunes east of Antioch. Elevations: 0-100ft. (0-30m.) Blooms Mar-Sep.
<i>Phacelia phacelioides</i> Mt. Diablo phacelia	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland. Adjacent to trails, on rock outcrops and talus slopes; sometimes on serpentine. Elevations: 1640-4495ft. (500-1370m.) Blooms Apr-May.
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris' popcornflower	None/None G3T1Q/S1 1B.2	Annual herb. Chaparral, coastal prairie, coastal scrub. Mesic sites. Elevations: 10-525ft. (3-160m.) Blooms Mar-Jun.
<i>Plagiobothrys diffusus</i> San Francisco popcornflower	None/SCE G1Q/S1 1B.1	Annual herb. Coastal prairie, valley and foothill grassland. Historically from grassy slopes with marine influence. Elevations: 195-1180ft. (60-360m.) Blooms Mar-Jun.
<i>Plagiobothrys glaber</i> hairless popcornflower	None/None GX/SX 1A	Annual herb. Marshes and swamps, meadows and seeps. Coastal salt marshes and alkaline meadows. Elevations: 50-590ft. (15-180m.) Blooms Mar-May.
<i>Polemonium carneum</i> Oregon polemonium	None/None G3G4/S2 2B.2	Perennial herb. Coastal prairie, coastal scrub, lower montane coniferous forest. Elevations: 0-6005ft. (0-1830m.) Blooms Apr-Sep.
<i>Sanicula maritima</i> adobe sanicle	None/SCR G2/S2 1B.1	Perennial herb. Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland. Moist clay or ultramafic soils. Elevations: 100-785ft. (30-240m.) Blooms Feb-May.
<i>Sanicula saxatilis</i> rock sanicle	None/SCR G2/S2 1B.2	Perennial herb. Broadleafed upland forest, chaparral, valley and foothill grassland. Bedrock outcrops and talus slopes in chaparral or oak woodland habitat. Elevations: 2035-3855ft. (620-1175m.) Blooms Apr-May.
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625ft. (15-800m.) Blooms Jan-Apr(May).
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sand-spurrey	None/None G5T2/S2 1B.2	Perennial herb. Marshes and swamps, meadows and seeps. Alkaline. Elevations: 0-835ft. (0-255m.) Blooms Feb-May.
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i> most beautiful jewelflower	None/None G2T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Serpentine outcrops, on ridges and slopes. Elevations: 310-3280ft. (95-1000m.) Blooms (Mar)Apr-Sep(Oct).
<i>Streptanthus hispidus</i> Mt. Diablo jewelflower	None/None G2/S2 1B.3	Annual herb. Chaparral, valley and foothill grassland. Talus or rocky outcrops. Elevations: 1200-3935ft. (365-1200m.) Blooms Mar-Jun.

Scientific Name Common Name	Status	Habitat Requirements
<i>Stuckenia filiformis</i> ssp. <i>alpina</i> northern slender pondweed	None/None G5T5/S2S3 2B.2	Perennial rhizomatous herb (aquatic). Marshes and swamps. Shallow, clear water of lakes and drainage channels. Elevations: 985-7055ft. (300-2150m.) Blooms May-Jul.
<i>Suaeda californica</i> California seablite	FE/None G1/S1 1B.1	Perennial evergreen shrub. Marshes and swamps. Margins of coastal salt marshes. Elevations: 0-50ft. (0-15m.) Blooms Jul-Oct.
<i>Trifolium hydrophilum</i> saline clover	None/None G2/S2 1B.2	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. Elevations: 0-985ft. (0-300m.) Blooms Apr-Jun.
<i>Triquetrella californica</i> coastal triquetrella	None/None G2/S2 1B.2	Moss. Coastal bluff scrub, coastal scrub. Grows within 30m from the coast in coastal scrub, grasslands and in open gravels on roadsides, hillsides, rocky slopes, and fields. On gravel or thin soil over outcrops. Elevations: 35-330ft. (10-100m.)
<i>Tropidocarpum capparideum</i> caper-fruited tropidocarpum	None/None G1/S1 1B.1	Annual herb. Valley and foothill grassland. Alkaline clay. Elevations: 5-1495ft. (1-455m.) Blooms Mar-Apr.
<i>Viburnum ellipticum</i> oval-leaved viburnum	None/None G4G5/S3? 2B.3	Perennial deciduous shrub. Chaparral, cismontane woodland, lower montane coniferous forest. Elevations: 705-4595ft. (215-1400m.) Blooms May-Jun.
Invertebrates		
<i>Danaus plexippus</i> pop. 1 monarch - California overwintering population	FC/None G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	FT/None G5T1/S1	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. <i>Plantago erecta</i> is the primary host plant; <i>Orthocarpus densiflorus</i> and <i>O. purpurascens</i> are the secondary host plants.
Fish		
<i>Archoplites interruptus</i> Sacramento perch	None/None G2G3/S1 SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.
<i>Eucyclogobius newberryi</i> tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need still but not stagnant water and high oxygen levels.
<i>Spirinchus thaleichthys</i> longfin smelt	FC/ST G5/S1	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt but can be found in completely freshwater to almost pure seawater.
Amphibians		
<i>Ambystoma californiense</i> pop. 1 California tiger salamander - central California DPS	FT/ST G2G3/S3 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.
<i>Rana boylei</i> foothill yellow-legged frog	None/SE G3/S3 SSC	Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.

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Scientific Name Common Name	Status	Habitat Requirements
<i>Rana draytonii</i> California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
Reptiles		
<i>Anniella pulchra</i> Northern California legless lizard	None/None G3/S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	FT/ST G4T2/S2	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna, and woodland habitats. Mostly south-facing slopes and ravines, with rock outcrops, deep crevices, or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.
Birds		
<i>Accipiter cooperii</i> Cooper's hawk	None/None G5/S4 WL	Woodland, chiefly of open, interrupted, or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.
<i>Accipiter striatus</i> sharp-shinned hawk	None/None G5/S4 WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G1G2/S1S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
<i>Branta hutchinsii leucopareia</i> cackling (=Aleutian Canada) goose	FD/None G5T3/S3 WL	Winters on lakes and inland prairies. Forages on natural pasture or that cultivated to grain; loafs on lakes, reservoirs, ponds.
<i>Buteo regalis</i> ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.

Scientific Name Common Name	Status	Habitat Requirements
<i>Buteo swainsoni</i> Swainson's hawk	None/ST G5/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.
<i>Charadrius nivosus</i> western snowy plover	FT/None G3T3/S2 SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.
<i>Circus hudsonius</i> northern harrier	None/None G5/S3 SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.
<i>Coturnicops noveboracensis</i> yellow rail	None/None G4/S1S2 SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.
<i>Eremophila alpestris actia</i> California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also, main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.
<i>Falco mexicanus</i> prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	None/None G5T3/S3 SSC	Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.
<i>Haliaeetus leucocephalus</i> bald eagle	FD/SE G5/S3 FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.
<i>Laterallus jamaicensis coturniculus</i> California black rail	None/ST G3G4T1/S1 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.
<i>Melospiza melodia maxillaris</i> Suisun song sparrow	None/None G5T3/S3 SSC	Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and Salicornia; also known to frequent tangles bordering sloughs.
<i>Melospiza melodia pusillula</i> Alameda song sparrow	None/None G5T2?/S2S3 SSC	Resident of salt marshes bordering south arm of San Francisco Bay. Inhabits Salicornia marshes; nests low in Grindelia bushes (high enough to escape high tides) and in Salicornia.
<i>Nannopterum auritum</i> double-crested cormorant	None/None G5/S4 WL	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.

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Scientific Name Common Name	Status	Habitat Requirements
<i>Rallus obsoletus</i> California Ridgway's rail	FE/SE G3T1/S1 FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed but feeds away from cover on invertebrates from mud-bottomed sloughs.
<i>Rynchops niger</i> black skimmer	None/None G5/S2 SSC	Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually less than 200 pairs. .
<i>Setophaga petechia</i> yellow warbler	None/None G5/S3S4 SSC	Riparian plant associations near water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.
<i>Sternula antillarum browni</i> California least tern	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.
Mammals		
<i>Antrozous pallidus</i> pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls, ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.
<i>Eumops perotis californicus</i> western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.
<i>Neotoma fuscipes annectens</i> San Francisco dusky-footed woodrat	None/None G5T2T3/S2S3 SSC	Typically found in forest habitats with moderate to dense understory. Can occur in chaparral, riparian woodlands, and coniferous forests, particularly redwood. Builds middens out of grasses, leaves, and woody debris. This subspecies is found only in the San Francisco Bay region.
<i>Nyctinomops macrotis</i> big free-tailed bat	None/None G5/S3 SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	FE/SE G1G2/S1S2 FP	Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.
<i>Scapanus latimanus parvus</i> Alameda Island mole	None/None G5T1Q/SH SSC	Only known from Alameda Island. Found in a variety of habitats, especially annual and perennial grasslands. Prefers moist, friable soils. Avoids flooded soils.
<i>Sorex vagrans halicoetes</i> salt-marsh wandering shrew	None/None G5T1/S1 SSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6-8 ft above sea level where abundant driftwood is scattered among Salicornia.

Scientific Name Common Name	Status	Habitat Requirements
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE/ST G4T2/S2	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.
FT = Federally Threatened SE = State Endangered FC = Federal Candidate Species ST = State Threatened FE = Federally Endangered SR = State Rare FS = Federally Sensitive SS = State Sensitive DL = Delisted SC = State Candidate SSC = CDFW Species of Special Concern FP = Fully Protected G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind5 CRPR (California Rare Plant Rank): 1A=Presumed Extinct in California 1B=Rare, Threatened, or Endangered in California and elsewhere 2=Rare, Threatened, or Endangered in California, but more common elsewhere 3=Need more information (a Review List) 4=Plants of Limited Distribution (a Watch List) CRPR Threat Code Extension: .1=Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) .2=Fairly endangered in California (20-80% occurrences threatened) .3=Not very endangered in California (<20% of occurrences threatened) Sources: CNDDDB (CDFW, 2022a); USFWS (2022a), CDFW Special Animals List (2021). CDFW Special Plants List (2021) and CNPS Rare Plant Inventory (2022)		

Appendix D

CalEEMod Outputs

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Barry Miller Moraga GP and HE EIR - GHG Buildout
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	1,103.00	Dwelling Unit	68.94	1,103,000.00	3155
Single Family Housing	731.00	Dwelling Unit	237.34	1,315,800.00	2091

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	5			Operational Year	2031
Utility Company	MCE				
CO2 Intensity (lb/MWhr)	289.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase -
- Off-road Equipment -
- Trips and VMT -
- Grading -
- Architectural Coating -
- Vehicle Trips - Based on Fehr & Peers daily VMT projections, adjusted for annual VMT.
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -

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Woodstoves - No Woodstoves or wood fireplaces pursuant BAAQMD Reg 6, Rule 3.

Area Coating - Based on BAAQMD Reg 8 Rule 3

Water And Wastewater -

Solid Waste -

Mobile Land Use Mitigation - Based on information provided by the applicant

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	187.51	0.00
tblFireplaces	NumberWood	314.33	0.00
tblGrading	AcresOfGrading	1,860.00	1,395.00
tblGrading	AcresOfGrading	360.00	270.00
tblVehicleTrips	HO_TL	5.70	3.90
tblVehicleTrips	HO_TL	5.70	3.90
tblVehicleTrips	HS_TL	4.80	3.60
tblVehicleTrips	HS_TL	4.80	3.60
tblVehicleTrips	HW_TL	10.80	7.00
tblVehicleTrips	HW_TL	10.80	7.00
tblWoodstoves	NumberCatalytic	22.06	0.00
tblWoodstoves	NumberCatalytic	29.24	0.00
tblWoodstoves	NumberNoncatalytic	22.06	0.00
tblWoodstoves	NumberNoncatalytic	29.24	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00

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tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

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					
2022	0.1300	1.2488	1.0162	1.9300e-003	5.7500e-003	0.0603	0.0661	1.5300e-003	0.0561	0.0576	0.0000	169.4760	169.4760	0.0465	1.3000e-004	170.6769
2023	0.3000	2.7964	2.5969	5.1800e-003	0.0154	0.1298	0.1452	4.1000e-003	0.1207	0.1248	0.0000	453.9732	453.9732	0.1241	3.3000e-004	457.1745
2024	0.3451	3.4282	2.4790	5.1500e-003	2.1396	0.1554	2.2949	1.1077	0.1431	1.2508	0.0000	453.2996	453.2996	0.1393	3.6000e-004	456.8905
2025	0.3800	3.6218	3.3982	8.0100e-003	1.8157	0.1472	1.9629	0.6023	0.1354	0.7377	0.0000	704.4794	704.4794	0.2233	3.8000e-004	710.1761
2026	0.3842	3.6499	3.4842	8.2600e-003	1.5462	0.1477	1.6939	0.5173	0.1359	0.6532	0.0000	726.3448	726.3448	0.2304	3.7000e-004	732.2139
2027	0.4371	3.2465	4.2242	0.0127	1.7917	0.1109	1.9026	0.4635	0.1029	0.5664	0.0000	1,174.4701	1,174.4701	0.1585	0.0479	1,192.7078
2028	0.4652	2.8791	4.7212	0.0161	1.2530	0.0794	1.3324	0.3372	0.0747	0.4119	0.0000	1,520.2272	1,520.2272	0.0964	0.0852	1,548.0374
2029	0.4526	2.8673	4.6452	0.0158	1.2578	0.0794	1.3372	0.3385	0.0747	0.4132	0.0000	1,502.1437	1,502.1437	0.0956	0.0833	1,529.3479
2030	0.4318	2.2616	4.5758	0.0161	1.2578	0.0296	1.2874	0.3385	0.0290	0.3675	0.0000	1,522.1585	1,522.1585	0.0371	0.0814	1,547.3397
2031	0.4187	2.2507	4.5064	0.0159	1.2578	0.0293	1.2871	0.3385	0.0287	0.3672	0.0000	1,504.1724	1,504.1724	0.0361	0.0798	1,528.8395
2032	0.4087	2.2511	4.4648	0.0157	1.2626	0.0292	1.2918	0.3398	0.0286	0.3684	0.0000	1,494.2059	1,494.2059	0.0353	0.0787	1,518.5285
2033	0.3954	2.2275	4.3807	0.0154	1.2530	0.0287	1.2817	0.3372	0.0282	0.3654	0.0000	1,469.0368	1,469.0368	0.0343	0.0769	1,492.7953

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
Year	tons/yr										MT/yr					
2034	0.3861	2.2212	4.3362	0.0153	1.2530	0.0285	1.2815	0.3372	0.0280	0.3652	0.0000	1,456.777 2	1,456.777 2	0.0336	0.0758	1,480.198 7
2035	0.3671	2.1223	4.3093	0.0152	1.2578	0.0209	1.2787	0.3385	0.0204	0.3589	0.0000	1,451.623 1	1,451.623 1	0.0321	0.0751	1,474.814 2
2036	0.3685	2.1304	4.3258	0.0152	1.2627	0.0210	1.2836	0.3398	0.0205	0.3603	0.0000	1,457.184 9	1,457.184 9	0.0322	0.0754	1,480.464 8
2037	0.3671	2.1223	4.3093	0.0152	1.2578	0.0209	1.2787	0.3385	0.0204	0.3589	0.0000	1,451.623 1	1,451.623 1	0.0321	0.0751	1,474.814 2
2038	0.3671	2.1223	4.3093	0.0152	1.2578	0.0209	1.2787	0.3385	0.0204	0.3589	0.0000	1,451.623 1	1,451.623 1	0.0321	0.0751	1,474.814 2
2039	0.3657	2.1142	4.2928	0.0151	1.2530	0.0208	1.2738	0.3372	0.0203	0.3575	0.0000	1,446.061 3	1,446.061 3	0.0320	0.0748	1,469.163 6
2040	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.356 0	1,415.356 0	0.0294	0.0719	1,437.526 0
2041	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.356 0	1,415.356 0	0.0294	0.0719	1,437.526 0
2042	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.356 0	1,415.356 0	0.0294	0.0719	1,437.526 0
2043	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.356 0	1,415.356 0	0.0294	0.0719	1,437.526 0
2044	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.356 0	1,415.356 0	0.0294	0.0719	1,437.526 0
2045	0.3174	2.0551	4.1065	0.0145	1.2530	0.0177	1.2707	0.3372	0.0173	0.3545	0.0000	1,393.516 1	1,393.516 1	0.0282	0.0702	1,415.142 5
2046	0.3186	2.0630	4.1223	0.0145	1.2579	0.0178	1.2756	0.3385	0.0173	0.3559	0.0000	1,398.875 7	1,398.875 7	0.0283	0.0705	1,420.585 4
2047	0.3186	2.0630	4.1223	0.0145	1.2579	0.0178	1.2756	0.3385	0.0173	0.3559	0.0000	1,398.875 7	1,398.875 7	0.0283	0.0705	1,420.585 4
2048	0.3198	2.0709	4.1381	0.0146	1.2627	0.0178	1.2805	0.3398	0.0174	0.3572	0.0000	1,404.235 4	1,404.235 4	0.0284	0.0708	1,426.028 3
2049	0.3186	2.0630	4.1223	0.0145	1.2579	0.0178	1.2756	0.3385	0.0173	0.3559	0.0000	1,398.875 7	1,398.875 7	0.0283	0.0705	1,420.585 4
2050	0.3124	2.0539	4.0852	0.0144	1.2530	0.0176	1.2706	0.3372	0.0172	0.3544	0.0000	1,386.800 1	1,386.800 1	0.0277	0.0697	1,408.249 6
2051	0.1369	0.5691	2.0650	3.7300e-003	0.2458	0.0139	0.2597	0.0603	0.0139	0.0742	0.0000	319.6348	319.6348	0.0109	0.0000	319.9078
2052	1.0505	0.4439	1.9038	3.3700e-003	0.0295	0.0139	0.0434	7.2300e-003	0.0139	0.0212	0.0000	289.8481	289.8481	9.7500e-003	0.0000	290.0918

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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					
2053	10.1151	0.0949	0.2339	3.9000e-004	0.1880	9.7000e-004	0.1889	0.0461	9.7000e-004	0.0471	0.0000	33.3200	33.3200	1.1700e-003	0.0000	33.3493
2054	6.0070	0.0563	0.1389	2.3000e-004	0.1116	5.8000e-004	0.1122	0.0274	5.8000e-004	0.0280	0.0000	19.7877	19.7877	7.0000e-004	0.0000	19.8051
Maximum	10.1151	3.6499	4.7212	0.0161	2.1396	0.1554	2.2949	1.1077	0.1431	1.2508	0.0000	1,522.1585	1,522.1585	0.2304	0.0852	1,548.0374

2.1 Overall Construction**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					
2022	0.1300	1.2488	1.0162	1.9300e-003	5.7500e-003	0.0603	0.0661	1.5300e-003	0.0561	0.0576	0.0000	169.4758	169.4758	0.0465	1.3000e-004	170.6767
2023	0.3000	2.7964	2.5969	5.1800e-003	0.0154	0.1298	0.1452	4.1000e-003	0.1207	0.1248	0.0000	453.9727	453.9727	0.1241	3.3000e-004	457.1740
2024	0.3451	3.4282	2.4790	5.1500e-003	2.1396	0.1554	2.2949	1.1077	0.1431	1.2508	0.0000	453.2991	453.2991	0.1393	3.6000e-004	456.8900
2025	0.3799	3.6218	3.3982	8.0100e-003	1.8157	0.1472	1.9629	0.6023	0.1354	0.7377	0.0000	704.4786	704.4786	0.2233	3.8000e-004	710.1753
2026	0.3842	3.6499	3.4842	8.2600e-003	1.5462	0.1477	1.6939	0.5173	0.1359	0.6532	0.0000	726.3439	726.3439	0.2304	3.7000e-004	732.2130
2027	0.4371	3.2465	4.2242	0.0127	1.7917	0.1109	1.9026	0.4635	0.1029	0.5664	0.0000	1,174.4695	1,174.4695	0.1585	0.0479	1,192.7072
2028	0.4652	2.8791	4.7212	0.0161	1.2530	0.0794	1.3324	0.3372	0.0747	0.4119	0.0000	1,520.2269	1,520.2269	0.0964	0.0852	1,548.0370
2029	0.4526	2.8673	4.6452	0.0158	1.2578	0.0794	1.3372	0.3385	0.0747	0.4132	0.0000	1,502.1433	1,502.1433	0.0956	0.0833	1,529.3475
2030	0.4318	2.2616	4.5758	0.0161	1.2578	0.0296	1.2874	0.3385	0.0290	0.3675	0.0000	1,522.1581	1,522.1581	0.0371	0.0814	1,547.3393

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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					
2031	0.4187	2.2507	4.5064	0.0159	1.2578	0.0293	1.2871	0.3385	0.0287	0.3672	0.0000	1,504.1720	1,504.1720	0.0361	0.0798	1,528.8391
2032	0.4087	2.2511	4.4648	0.0157	1.2626	0.0292	1.2918	0.3398	0.0286	0.3684	0.0000	1,494.2055	1,494.2055	0.0353	0.0787	1,518.5281
2033	0.3954	2.2275	4.3807	0.0154	1.2530	0.0287	1.2817	0.3372	0.0282	0.3654	0.0000	1,469.0364	1,469.0364	0.0343	0.0769	1,492.7949
2034	0.3861	2.2212	4.3362	0.0153	1.2530	0.0285	1.2815	0.3372	0.0280	0.3652	0.0000	1,456.7768	1,456.7768	0.0336	0.0758	1,480.1983
2035	0.3671	2.1223	4.3093	0.0152	1.2578	0.0209	1.2787	0.3385	0.0204	0.3589	0.0000	1,451.6227	1,451.6227	0.0321	0.0751	1,474.8138
2036	0.3685	2.1304	4.3258	0.0152	1.2627	0.0210	1.2836	0.3398	0.0205	0.3603	0.0000	1,457.1845	1,457.1845	0.0322	0.0754	1,480.4644
2037	0.3671	2.1223	4.3093	0.0152	1.2578	0.0209	1.2787	0.3385	0.0204	0.3589	0.0000	1,451.6227	1,451.6227	0.0321	0.0751	1,474.8138
2038	0.3671	2.1223	4.3093	0.0152	1.2578	0.0209	1.2787	0.3385	0.0204	0.3589	0.0000	1,451.6227	1,451.6227	0.0321	0.0751	1,474.8138
2039	0.3657	2.1142	4.2928	0.0151	1.2530	0.0208	1.2738	0.3372	0.0203	0.3575	0.0000	1,446.0609	1,446.0609	0.0320	0.0748	1,469.1632
2040	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.3556	1,415.3556	0.0294	0.0719	1,437.5256
2041	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.3556	1,415.3556	0.0294	0.0719	1,437.5256
2042	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.3556	1,415.3556	0.0294	0.0719	1,437.5256
2043	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.3556	1,415.3556	0.0294	0.0719	1,437.5256
2044	0.3333	2.0678	4.1807	0.0147	1.2578	0.0180	1.2759	0.3385	0.0176	0.3561	0.0000	1,415.3556	1,415.3556	0.0294	0.0719	1,437.5256
2045	0.3174	2.0551	4.1065	0.0145	1.2530	0.0177	1.2707	0.3372	0.0173	0.3545	0.0000	1,393.5156	1,393.5156	0.0282	0.0702	1,415.1421
2046	0.3186	2.0630	4.1223	0.0145	1.2579	0.0178	1.2756	0.3385	0.0173	0.3559	0.0000	1,398.8753	1,398.8753	0.0283	0.0705	1,420.5850
2047	0.3186	2.0630	4.1223	0.0145	1.2579	0.0178	1.2756	0.3385	0.0173	0.3559	0.0000	1,398.8753	1,398.8753	0.0283	0.0705	1,420.5850
2048	0.3198	2.0709	4.1381	0.0146	1.2627	0.0178	1.2805	0.3398	0.0174	0.3572	0.0000	1,404.2350	1,404.2350	0.0284	0.0708	1,426.0278
2049	0.3186	2.0630	4.1223	0.0145	1.2579	0.0178	1.2756	0.3385	0.0173	0.3559	0.0000	1,398.8753	1,398.8753	0.0283	0.0705	1,420.5850

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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					
2050	0.3124	2.0539	4.0852	0.0144	1.2530	0.0176	1.2706	0.3372	0.0172	0.3544	0.0000	1,386.7996	1,386.7996	0.0277	0.0697	1,408.2492
2051	0.1368	0.5691	2.0650	3.7300e-003	0.2458	0.0139	0.2597	0.0603	0.0139	0.0742	0.0000	319.6344	319.6344	0.0109	0.0000	319.9074
2052	1.0505	0.4439	1.9038	3.3700e-003	0.0295	0.0139	0.0434	7.2300e-003	0.0139	0.0212	0.0000	289.8478	289.8478	9.7500e-003	0.0000	290.0915
2053	10.1151	0.0949	0.2339	3.9000e-004	0.1880	9.7000e-004	0.1889	0.0461	9.7000e-004	0.0471	0.0000	33.3199	33.3199	1.1700e-003	0.0000	33.3492
2054	6.0070	0.0563	0.1389	2.3000e-004	0.1116	5.8000e-004	0.1122	0.0274	5.8000e-004	0.0280	0.0000	19.7877	19.7877	7.0000e-004	0.0000	19.8051
Maximum	10.1151	3.6499	4.7212	0.0161	2.1396	0.1554	2.2949	1.1077	0.1431	1.2508	0.0000	1,522.1581	1,522.1581	0.2304	0.0852	1,548.0370

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-18-2022	11-17-2022	0.9342	0.9342
2	11-18-2022	2-17-2023	0.8553	0.8553
3	2-18-2023	5-17-2023	0.7571	0.7571
4	5-18-2023	8-17-2023	0.7826	0.7826
5	8-18-2023	11-17-2023	0.7827	0.7827
6	11-18-2023	2-17-2024	0.7719	0.7719
7	2-18-2024	5-17-2024	0.9350	0.9350
8	5-18-2024	8-17-2024	0.9827	0.9827
9	8-18-2024	11-17-2024	0.9828	0.9828
10	11-18-2024	2-17-2025	0.9676	0.9676
11	2-18-2025	5-17-2025	0.9828	0.9828

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12	5-18-2025	8-17-2025	1.0158	1.0158
13	8-18-2025	11-17-2025	1.0160	1.0160
14	11-18-2025	2-17-2026	1.0160	1.0160
15	2-18-2026	5-17-2026	0.9827	0.9827
16	5-18-2026	8-17-2026	1.0157	1.0157
17	8-18-2026	11-17-2026	1.0158	1.0158
18	11-18-2026	2-17-2027	1.0158	1.0158
19	2-18-2027	5-17-2027	0.9825	0.9825
20	5-18-2027	8-17-2027	0.8991	0.8991
21	8-18-2027	11-17-2027	0.8568	0.8568
22	11-18-2027	2-17-2028	0.8651	0.8651
23	2-18-2028	5-17-2028	0.8287	0.8287
24	5-18-2028	8-17-2028	0.8345	0.8345
25	8-18-2028	11-17-2028	0.8483	0.8483
26	11-18-2028	2-17-2029	0.8557	0.8557
27	2-18-2029	5-17-2029	0.8101	0.8101
28	5-18-2029	8-17-2029	0.8253	0.8253
29	8-18-2029	11-17-2029	0.8387	0.8387
30	11-18-2029	2-17-2030	0.7684	0.7684
31	2-18-2030	5-17-2030	0.6573	0.6573
32	5-18-2030	8-17-2030	0.6676	0.6676
33	8-18-2030	11-17-2030	0.6807	0.6807
34	11-18-2030	2-17-2031	0.6894	0.6894
35	2-18-2031	5-17-2031	0.6513	0.6513
36	5-18-2031	8-17-2031	0.6616	0.6616
37	8-18-2031	11-17-2031	0.6745	0.6745
38	11-18-2031	2-17-2032	0.6836	0.6836
39	2-18-2032	5-17-2032	0.6537	0.6537
40	5-18-2032	8-17-2032	0.6566	0.6566

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41	8-18-2032	11-17-2032	0.6693	0.6693
42	11-18-2032	2-17-2033	0.6787	0.6787
43	2-18-2033	5-17-2033	0.6421	0.6421
44	5-18-2033	8-17-2033	0.6524	0.6524
45	8-18-2033	11-17-2033	0.6650	0.6650
46	11-18-2033	2-17-2034	0.6744	0.6744
47	2-18-2034	5-17-2034	0.6382	0.6382
48	5-18-2034	8-17-2034	0.6484	0.6484
49	8-18-2034	11-17-2034	0.6609	0.6609
50	11-18-2034	2-17-2035	0.6554	0.6554
51	2-18-2035	5-17-2035	0.6069	0.6069
52	5-18-2035	8-17-2035	0.6161	0.6161
53	8-18-2035	11-17-2035	0.6285	0.6285
54	11-18-2035	2-17-2036	0.6399	0.6399
55	2-18-2036	5-17-2036	0.6138	0.6138
56	5-18-2036	8-17-2036	0.6161	0.6161
57	8-18-2036	11-17-2036	0.6285	0.6285
58	11-18-2036	2-17-2037	0.6399	0.6399
59	2-18-2037	5-17-2037	0.6069	0.6069
60	5-18-2037	8-17-2037	0.6161	0.6161
61	8-18-2037	11-17-2037	0.6285	0.6285
62	11-18-2037	2-17-2038	0.6399	0.6399
63	2-18-2038	5-17-2038	0.6069	0.6069
64	5-18-2038	8-17-2038	0.6161	0.6161
65	8-18-2038	11-17-2038	0.6285	0.6285
66	11-18-2038	2-17-2039	0.6399	0.6399
67	2-18-2039	5-17-2039	0.6069	0.6069
68	5-18-2039	8-17-2039	0.6161	0.6161
69	8-18-2039	11-17-2039	0.6285	0.6285

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70	11-18-2039	2-17-2040	0.6279	0.6279
71	2-18-2040	5-17-2040	0.5916	0.5916
72	5-18-2040	8-17-2040	0.5935	0.5935
73	8-18-2040	11-17-2040	0.6058	0.6058
74	11-18-2040	2-17-2041	0.6170	0.6170
75	2-18-2041	5-17-2041	0.5849	0.5849
76	5-18-2041	8-17-2041	0.5935	0.5935
77	8-18-2041	11-17-2041	0.6058	0.6058
78	11-18-2041	2-17-2042	0.6170	0.6170
79	2-18-2042	5-17-2042	0.5849	0.5849
80	5-18-2042	8-17-2042	0.5935	0.5935
81	8-18-2042	11-17-2042	0.6058	0.6058
82	11-18-2042	2-17-2043	0.6170	0.6170
83	2-18-2043	5-17-2043	0.5849	0.5849
84	5-18-2043	8-17-2043	0.5935	0.5935
85	8-18-2043	11-17-2043	0.6058	0.6058
86	11-18-2043	2-17-2044	0.6170	0.6170
87	2-18-2044	5-17-2044	0.5916	0.5916
88	5-18-2044	8-17-2044	0.5935	0.5935
89	8-18-2044	11-17-2044	0.6058	0.6058
90	11-18-2044	2-17-2045	0.6143	0.6143
91	2-18-2045	5-17-2045	0.5799	0.5799
92	5-18-2045	8-17-2045	0.5884	0.5884
93	8-18-2045	11-17-2045	0.6006	0.6006
94	11-18-2045	2-17-2046	0.6119	0.6119
95	2-18-2046	5-17-2046	0.5799	0.5799
96	5-18-2046	8-17-2046	0.5884	0.5884
97	8-18-2046	11-17-2046	0.6006	0.6006
98	11-18-2046	2-17-2047	0.6119	0.6119

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

99	2-18-2047	5-17-2047	0.5799	0.5799
100	5-18-2047	8-17-2047	0.5884	0.5884
101	8-18-2047	11-17-2047	0.6006	0.6006
102	11-18-2047	2-17-2048	0.6119	0.6119
103	2-18-2048	5-17-2048	0.5866	0.5866
104	5-18-2048	8-17-2048	0.5884	0.5884
105	8-18-2048	11-17-2048	0.6006	0.6006
106	11-18-2048	2-17-2049	0.6119	0.6119
107	2-18-2049	5-17-2049	0.5799	0.5799
108	5-18-2049	8-17-2049	0.5884	0.5884
109	8-18-2049	11-17-2049	0.6006	0.6006
110	11-18-2049	2-17-2050	0.6111	0.6111
111	2-18-2050	5-17-2050	0.5783	0.5783
112	5-18-2050	8-17-2050	0.5866	0.5866
113	8-18-2050	11-17-2050	0.5990	0.5990
114	11-18-2050	2-17-2051	0.4305	0.4305
115	2-18-2051	5-17-2051	0.1887	0.1887
116	5-18-2051	8-17-2051	0.1534	0.1534
117	8-18-2051	11-17-2051	0.1534	0.1534
118	11-18-2051	2-17-2052	0.1534	0.1534
119	2-18-2052	5-17-2052	0.1500	0.1500
120	5-18-2052	8-17-2052	0.1534	0.1534
121	8-18-2052	11-17-2052	0.1534	0.1534
122	11-18-2052	2-17-2053	2.3079	2.3079
123	2-18-2053	5-17-2053	2.4868	2.4868
124	5-18-2053	8-17-2053	2.5706	2.5706
125	8-18-2053	11-17-2053	2.5706	2.5706
126	11-18-2053	2-17-2054	2.5706	2.5706
127	2-18-2054	5-17-2054	2.4868	2.4868

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

128	5-18-2054	8-17-2054	2.2353	2.2353
		Highest	2.5706	2.5706

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	11.5600	0.1941	13.5976	9.6000e-004		0.0786	0.0786		0.0786	0.0786	0.0000	65.7133	65.7133	0.0220	8.0000e-004	66.5014
Energy	0.2682	2.2918	0.9752	0.0146		0.1853	0.1853		0.1853	0.1853	0.0000	3,990.1756	3,990.1756	0.2029	0.0671	4,015.2408
Mobile	4.0598	3.9594	35.5791	0.0674	8.5277	0.0455	8.5732	2.2786	0.0424	2.3210	0.0000	6,605.9977	6,605.9977	0.4552	0.3340	6,716.9131
Waste						0.0000	0.0000		0.0000	0.0000	281.2643	0.0000	281.2643	16.6222	0.0000	696.8203
Water						0.0000	0.0000		0.0000	0.0000	37.9095	119.7259	157.6353	3.9073	0.0936	283.2072
Total	15.8880	6.4453	50.1520	0.0830	8.5277	0.3094	8.8370	2.2786	0.3063	2.5848	319.1737	10,781.6125	11,100.7862	21.2096	0.4955	11,778.6829

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****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	11.5600	0.1941	13.5976	9.6000e-004		0.0786	0.0786		0.0786	0.0786	0.0000	65.7133	65.7133	0.0220	8.0000e-004	66.5014
Energy	0.2682	2.2918	0.9752	0.0146		0.1853	0.1853		0.1853	0.1853	0.0000	2,654.1157	2,654.1157	0.0509	0.0487	2,669.8878
Mobile	4.0952	4.0161	36.0825	0.0688	8.7135	0.0463	8.7599	2.3282	0.0432	2.3714	0.0000	6,743.2805	6,743.2805	0.4607	0.3388	6,855.7688
Waste						0.0000	0.0000		0.0000	0.0000	281.2643	0.0000	281.2643	16.6222	0.0000	696.8203
Water						0.0000	0.0000		0.0000	0.0000	37.9095	119.7259	157.6353	3.9073	0.0936	283.2072
Total	15.9233	6.5020	50.6553	0.0844	8.7135	0.3102	9.0237	2.3282	0.3070	2.6352	319.1737	9,582.8353	9,902.0091	21.0631	0.4819	10,572.1855

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	-0.22	-0.88	-1.00	-1.69	-2.18	-0.27	-2.11	-2.18	-0.25	-1.95	0.00	11.12	10.80	0.69	2.75	10.24

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	8/18/2022	2/28/2024	5	400	
2	Site Preparation	Site Preparation	2/29/2024	1/29/2025	5	240	
3	Grading	Grading	1/30/2025	6/16/2027	5	620	

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4	Building Construction	Building Construction	6/17/2027	3/22/2051	5	6200
5	Paving	Paving	3/23/2051	11/27/2052	5	440
6	Architectural Coating	Architectural Coating	11/28/2052	8/5/2054	5	440

Acres of Grading (Site Preparation Phase): 270**Acres of Grading (Grading Phase): 1395****Acres of Paving: 0****Residential Indoor: 4,898,070; Residential Outdoor: 1,632,690; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42

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Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,057.00	196.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	211.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 2022****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	0.1280	1.2474	0.9988	1.8800e-003		0.0603	0.0603		0.0560	0.0560	0.0000	164.8526	164.8526	0.0463	0.0000	166.0102
Total	0.1280	1.2474	0.9988	1.8800e-003		0.0603	0.0603		0.0560	0.0560	0.0000	164.8526	164.8526	0.0463	0.0000	166.0102

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****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	2.0000e-003	1.4400e-003	0.0174	5.0000e-005	5.7500e-003	3.0000e-005	5.7800e-003	1.5300e-003	3.0000e-005	1.5600e-003	0.0000	4.6234	4.6234	1.4000e-004	1.3000e-004	4.6667
Total	2.0000e-003	1.4400e-003	0.0174	5.0000e-005	5.7500e-003	3.0000e-005	5.7800e-003	1.5300e-003	3.0000e-005	1.5600e-003	0.0000	4.6234	4.6234	1.4000e-004	1.3000e-004	4.6667

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	0.1280	1.2474	0.9988	1.8800e-003		0.0603	0.0603		0.0560	0.0560	0.0000	164.8524	164.8524	0.0463	0.0000	166.0100
Total	0.1280	1.2474	0.9988	1.8800e-003		0.0603	0.0603		0.0560	0.0560	0.0000	164.8524	164.8524	0.0463	0.0000	166.0100

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****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	2.0000e-003	1.4400e-003	0.0174	5.0000e-005	5.7500e-003	3.0000e-005	5.7800e-003	1.5300e-003	3.0000e-005	1.5600e-003	0.0000	4.6234	4.6234	1.4000e-004	1.3000e-004	4.6667
Total	2.0000e-003	1.4400e-003	0.0174	5.0000e-005	5.7500e-003	3.0000e-005	5.7800e-003	1.5300e-003	3.0000e-005	1.5600e-003	0.0000	4.6234	4.6234	1.4000e-004	1.3000e-004	4.6667

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					
Off-Road	0.2950	2.7930	2.5536	5.0500e-003		0.1297	0.1297		0.1206	0.1206	0.0000	441.8969	441.8969	0.1238	0.0000	444.9908
Total	0.2950	2.7930	2.5536	5.0500e-003		0.1297	0.1297		0.1206	0.1206	0.0000	441.8969	441.8969	0.1238	0.0000	444.9908

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****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	4.9900e-003	3.4200e-003	0.0432	1.3000e-004	0.0154	8.0000e-005	0.0155	4.1000e-003	7.0000e-005	4.1700e-003	0.0000	12.0763	12.0763	3.5000e-004	3.3000e-004	12.1838
Total	4.9900e-003	3.4200e-003	0.0432	1.3000e-004	0.0154	8.0000e-005	0.0155	4.1000e-003	7.0000e-005	4.1700e-003	0.0000	12.0763	12.0763	3.5000e-004	3.3000e-004	12.1838

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	0.2950	2.7930	2.5536	5.0500e-003		0.1297	0.1297		0.1206	0.1206	0.0000	441.8964	441.8964	0.1238	0.0000	444.9903
Total	0.2950	2.7930	2.5536	5.0500e-003		0.1297	0.1297		0.1206	0.1206	0.0000	441.8964	441.8964	0.1238	0.0000	444.9903

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****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	4.9900e-003	3.4200e-003	0.0432	1.3000e-004	0.0154	8.0000e-005	0.0155	4.1000e-003	7.0000e-005	4.1700e-003	0.0000	12.0763	12.0763	3.5000e-004	3.3000e-004	12.1838
Total	4.9900e-003	3.4200e-003	0.0432	1.3000e-004	0.0154	8.0000e-005	0.0155	4.1000e-003	7.0000e-005	4.1700e-003	0.0000	12.0763	12.0763	3.5000e-004	3.3000e-004	12.1838

3.2 Demolition - 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	0.0482	0.4489	0.4237	8.3000e-004		0.0206	0.0206		0.0192	0.0192	0.0000	73.0915	73.0915	0.0205	0.0000	73.6028
Total	0.0482	0.4489	0.4237	8.3000e-004		0.0206	0.0206		0.0192	0.0192	0.0000	73.0915	73.0915	0.0205	0.0000	73.6028

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2024****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	7.7000e-004	5.0000e-004	6.6800e-003	2.0000e-005	2.5500e-003	1.0000e-005	2.5600e-003	6.8000e-004	1.0000e-005	6.9000e-004	0.0000	1.9480	1.9480	5.0000e-005	5.0000e-005	1.9645
Total	7.7000e-004	5.0000e-004	6.6800e-003	2.0000e-005	2.5500e-003	1.0000e-005	2.5600e-003	6.8000e-004	1.0000e-005	6.9000e-004	0.0000	1.9480	1.9480	5.0000e-005	5.0000e-005	1.9645

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	0.0482	0.4489	0.4237	8.3000e-004		0.0206	0.0206		0.0192	0.0192	0.0000	73.0914	73.0914	0.0205	0.0000	73.6027
Total	0.0482	0.4489	0.4237	8.3000e-004		0.0206	0.0206		0.0192	0.0192	0.0000	73.0914	73.0914	0.0205	0.0000	73.6027

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2024****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	7.7000e-004	5.0000e-004	6.6800e-003	2.0000e-005	2.5500e-003	1.0000e-005	2.5600e-003	6.8000e-004	1.0000e-005	6.9000e-004	0.0000	1.9480	1.9480	5.0000e-005	5.0000e-005	1.9645
Total	7.7000e-004	5.0000e-004	6.6800e-003	2.0000e-005	2.5500e-003	1.0000e-005	2.5600e-003	6.8000e-004	1.0000e-005	6.9000e-004	0.0000	1.9480	1.9480	5.0000e-005	5.0000e-005	1.9645

3.3 Site Preparation - 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					2.1214	0.0000	2.1214	1.1029	0.0000	1.1029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2914	2.9758	2.0078	4.1700e-003		0.1346	0.1346		0.1238	0.1238	0.0000	366.3549	366.3549	0.1185	0.0000	369.3170
Total	0.2914	2.9758	2.0078	4.1700e-003	2.1214	0.1346	2.2560	1.1029	0.1238	1.2267	0.0000	366.3549	366.3549	0.1185	0.0000	369.3170

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2024****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	4.7200e-003	3.0800e-003	0.0408	1.3000e-004	0.0156	8.0000e-005	0.0157	4.1400e-003	7.0000e-005	4.2100e-003	0.0000	11.9053	11.9053	3.2000e-004	3.1000e-004	12.0063
Total	4.7200e-003	3.0800e-003	0.0408	1.3000e-004	0.0156	8.0000e-005	0.0157	4.1400e-003	7.0000e-005	4.2100e-003	0.0000	11.9053	11.9053	3.2000e-004	3.1000e-004	12.0063

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					2.1214	0.0000	2.1214	1.1029	0.0000	1.1029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2914	2.9758	2.0078	4.1700e-003		0.1346	0.1346		0.1238	0.1238	0.0000	366.3544	366.3544	0.1185	0.0000	369.3166
Total	0.2914	2.9758	2.0078	4.1700e-003	2.1214	0.1346	2.2560	1.1029	0.1238	1.2267	0.0000	366.3544	366.3544	0.1185	0.0000	369.3166

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

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	4.7200e-003	3.0800e-003	0.0408	1.3000e-004	0.0156	8.0000e-005	0.0157	4.1400e-003	7.0000e-005	4.2100e-003	0.0000	11.9053	11.9053	3.2000e-004	3.1000e-004	12.0063
Total	4.7200e-003	3.0800e-003	0.0408	1.3000e-004	0.0156	8.0000e-005	0.0157	4.1400e-003	7.0000e-005	4.2100e-003	0.0000	11.9053	11.9053	3.2000e-004	3.1000e-004	12.0063

3.3 Site Preparation - 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					
Fugitive Dust					0.3329	0.0000	0.3329	0.1197	0.0000	0.1197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.2650	0.1881	4.0000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	35.1403	35.1403	0.0114	0.0000	35.4245
Total	0.0260	0.2650	0.1881	4.0000e-004	0.3329	0.0114	0.3443	0.1197	0.0105	0.1302	0.0000	35.1403	35.1403	0.0114	0.0000	35.4245

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2025****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	4.3000e-004	2.7000e-004	3.6800e-003	1.0000e-005	1.4900e-003	1.0000e-005	1.5000e-003	4.0000e-004	1.0000e-005	4.0000e-004	0.0000	1.1143	1.1143	3.0000e-005	3.0000e-005	1.1234
Total	4.3000e-004	2.7000e-004	3.6800e-003	1.0000e-005	1.4900e-003	1.0000e-005	1.5000e-003	4.0000e-004	1.0000e-005	4.0000e-004	0.0000	1.1143	1.1143	3.0000e-005	3.0000e-005	1.1234

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					0.3329	0.0000	0.3329	0.1197	0.0000	0.1197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.2650	0.1881	4.0000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	35.1403	35.1403	0.0114	0.0000	35.4244
Total	0.0260	0.2650	0.1881	4.0000e-004	0.3329	0.0114	0.3443	0.1197	0.0105	0.1302	0.0000	35.1403	35.1403	0.0114	0.0000	35.4244

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2025****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	4.3000e-004	2.7000e-004	3.6800e-003	1.0000e-005	1.4900e-003	1.0000e-005	1.5000e-003	4.0000e-004	1.0000e-005	4.0000e-004	0.0000	1.1143	1.1143	3.0000e-005	3.0000e-005	1.1234
Total	4.3000e-004	2.7000e-004	3.6800e-003	1.0000e-005	1.4900e-003	1.0000e-005	1.5000e-003	4.0000e-004	1.0000e-005	4.0000e-004	0.0000	1.1143	1.1143	3.0000e-005	3.0000e-005	1.1234

3.4 Grading - 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					
Fugitive Dust					1.4624	0.0000	1.4624	0.4771	0.0000	0.4771	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3482	3.3532	3.1597	7.4500e-003		0.1357	0.1357		0.1249	0.1249	0.0000	654.0746	654.0746	0.2115	0.0000	659.3631
Total	0.3482	3.3532	3.1597	7.4500e-003	1.4624	0.1357	1.5981	0.4771	0.1249	0.6020	0.0000	654.0746	654.0746	0.2115	0.0000	659.3631

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2025****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	5.4100e-003	3.3800e-003	0.0467	1.5000e-004	0.0190	9.0000e-005	0.0191	5.0500e-003	8.0000e-005	5.1300e-003	0.0000	14.1502	14.1502	3.5000e-004	3.6000e-004	14.2652
Total	5.4100e-003	3.3800e-003	0.0467	1.5000e-004	0.0190	9.0000e-005	0.0191	5.0500e-003	8.0000e-005	5.1300e-003	0.0000	14.1502	14.1502	3.5000e-004	3.6000e-004	14.2652

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					1.4624	0.0000	1.4624	0.4771	0.0000	0.4771	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3482	3.3531	3.1597	7.4500e-003		0.1357	0.1357		0.1249	0.1249	0.0000	654.0738	654.0738	0.2115	0.0000	659.3623
Total	0.3482	3.3531	3.1597	7.4500e-003	1.4624	0.1357	1.5981	0.4771	0.1249	0.6020	0.0000	654.0738	654.0738	0.2115	0.0000	659.3623

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2025

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	5.4100e-003	3.3800e-003	0.0467	1.5000e-004	0.0190	9.0000e-005	0.0191	5.0500e-003	8.0000e-005	5.1300e-003	0.0000	14.1502	14.1502	3.5000e-004	3.6000e-004	14.2652
Total	5.4100e-003	3.3800e-003	0.0467	1.5000e-004	0.0190	9.0000e-005	0.0191	5.0500e-003	8.0000e-005	5.1300e-003	0.0000	14.1502	14.1502	3.5000e-004	3.6000e-004	14.2652

3.4 Grading - 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					
Fugitive Dust					1.5256	0.0000	1.5256	0.5119	0.0000	0.5119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3786	3.6466	3.4362	8.1000e-003		0.1476	0.1476		0.1358	0.1358	0.0000	711.3061	711.3061	0.2301	0.0000	717.0573
Total	0.3786	3.6466	3.4362	8.1000e-003	1.5256	0.1476	1.6732	0.5119	0.1358	0.6476	0.0000	711.3061	711.3061	0.2301	0.0000	717.0573

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2026****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	5.5600e-003	3.3500e-003	0.0480	1.6000e-004	0.0206	9.0000e-005	0.0207	5.4900e-003	9.0000e-005	5.5700e-003	0.0000	15.0387	15.0387	3.5000e-004	3.7000e-004	15.1565
Total	5.5600e-003	3.3500e-003	0.0480	1.6000e-004	0.0206	9.0000e-005	0.0207	5.4900e-003	9.0000e-005	5.5700e-003	0.0000	15.0387	15.0387	3.5000e-004	3.7000e-004	15.1565

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					1.5256	0.0000	1.5256	0.5119	0.0000	0.5119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3786	3.6465	3.4362	8.1000e-003		0.1476	0.1476		0.1358	0.1358	0.0000	711.3052	711.3052	0.2301	0.0000	717.0565
Total	0.3786	3.6465	3.4362	8.1000e-003	1.5256	0.1476	1.6732	0.5119	0.1358	0.6476	0.0000	711.3052	711.3052	0.2301	0.0000	717.0565

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2026****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	5.5600e-003	3.3500e-003	0.0480	1.6000e-004	0.0206	9.0000e-005	0.0207	5.4900e-003	9.0000e-005	5.5700e-003	0.0000	15.0387	15.0387	3.5000e-004	3.7000e-004	15.1565
Total	5.5600e-003	3.3500e-003	0.0480	1.6000e-004	0.0206	9.0000e-005	0.0207	5.4900e-003	9.0000e-005	5.5700e-003	0.0000	15.0387	15.0387	3.5000e-004	3.7000e-004	15.1565

3.4 Grading - 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					
Fugitive Dust					1.0980	0.0000	1.0980	0.2768	0.0000	0.2768	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1726	1.6626	1.5667	3.6900e-003		0.0673	0.0673		0.0619	0.0619	0.0000	324.3120	324.3120	0.1049	0.0000	326.9342
Total	0.1726	1.6626	1.5667	3.6900e-003	1.0980	0.0673	1.1653	0.2768	0.0619	0.3387	0.0000	324.3120	324.3120	0.1049	0.0000	326.9342

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2027****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	2.4000e-003	1.4000e-003	0.0208	7.0000e-005	9.4000e-003	4.0000e-005	9.4400e-003	2.5000e-003	4.0000e-005	2.5400e-003	0.0000	6.7121	6.7121	1.5000e-004	1.6000e-004	6.7631
Total	2.4000e-003	1.4000e-003	0.0208	7.0000e-005	9.4000e-003	4.0000e-005	9.4400e-003	2.5000e-003	4.0000e-005	2.5400e-003	0.0000	6.7121	6.7121	1.5000e-004	1.6000e-004	6.7631

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					1.0980	0.0000	1.0980	0.2768	0.0000	0.2768	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1726	1.6626	1.5667	3.6900e-003		0.0673	0.0673		0.0619	0.0619	0.0000	324.3116	324.3116	0.1049	0.0000	326.9338
Total	0.1726	1.6626	1.5667	3.6900e-003	1.0980	0.0673	1.1653	0.2768	0.0619	0.3387	0.0000	324.3116	324.3116	0.1049	0.0000	326.9338

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2027****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	2.4000e-003	1.4000e-003	0.0208	7.0000e-005	9.4000e-003	4.0000e-005	9.4400e-003	2.5000e-003	4.0000e-005	2.5400e-003	0.0000	6.7121	6.7121	1.5000e-004	1.6000e-004	6.7631
Total	2.4000e-003	1.4000e-003	0.0208	7.0000e-005	9.4000e-003	4.0000e-005	9.4400e-003	2.5000e-003	4.0000e-005	2.5400e-003	0.0000	6.7121	6.7121	1.5000e-004	1.6000e-004	6.7631

3.5 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	0.0971	0.8854	1.1420	1.9100e-003		0.0375	0.0375		0.0352	0.0352	0.0000	164.6628	164.6628	0.0387	0.0000	165.6305
Total	0.0971	0.8854	1.1420	1.9100e-003		0.0375	0.0375		0.0352	0.0352	0.0000	164.6628	164.6628	0.0387	0.0000	165.6305

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2027****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	0.0135	0.6087	0.1812	2.6200e-003	0.0913	3.6000e-003	0.0949	0.0264	3.4400e-003	0.0299	0.0000	255.4847	255.4847	5.4600e-003	0.0377	266.8653
Worker	0.1515	0.0884	1.3135	4.4100e-003	0.5930	2.5100e-003	0.5955	0.1578	2.3100e-003	0.1601	0.0000	423.2984	423.2984	9.2400e-003	0.0100	426.5147
Total	0.1650	0.6971	1.4947	7.0300e-003	0.6843	6.1100e-003	0.6904	0.1842	5.7500e-003	0.1899	0.0000	678.7831	678.7831	0.0147	0.0478	693.3800

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	0.0971	0.8854	1.1420	1.9100e-003		0.0375	0.0375		0.0352	0.0352	0.0000	164.6626	164.6626	0.0387	0.0000	165.6303
Total	0.0971	0.8854	1.1420	1.9100e-003		0.0375	0.0375		0.0352	0.0352	0.0000	164.6626	164.6626	0.0387	0.0000	165.6303

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2027****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	0.0135	0.6087	0.1812	2.6200e-003	0.0913	3.6000e-003	0.0949	0.0264	3.4400e-003	0.0299	0.0000	255.4847	255.4847	5.4600e-003	0.0377	266.8653
Worker	0.1515	0.0884	1.3135	4.4100e-003	0.5930	2.5100e-003	0.5955	0.1578	2.3100e-003	0.1601	0.0000	423.2984	423.2984	9.2400e-003	0.0100	426.5147
Total	0.1650	0.6971	1.4947	7.0300e-003	0.6843	6.1100e-003	0.6904	0.1842	5.7500e-003	0.1899	0.0000	678.7831	678.7831	0.0147	0.0478	693.3800

3.5 Building Construction - 2028**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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2028****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	0.0243	1.1083	0.3287	4.7100e-003	0.1672	6.5400e-003	0.1738	0.0484	6.2600e-003	0.0546	0.0000	458.4966	458.4966	9.9400e-003	0.0677	478.9105
Worker	0.2631	0.1498	2.3015	7.8600e-003	1.0858	4.3000e-003	1.0901	0.2889	3.9500e-003	0.2928	0.0000	760.2354	760.2354	0.0156	0.0176	765.8598
Total	0.2874	1.2580	2.6302	0.0126	1.2530	0.0108	1.2638	0.3372	0.0102	0.3474	0.0000	1,218.7319	1,218.7319	0.0256	0.0852	1,244.7703

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2028****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	0.0243	1.1083	0.3287	4.7100e-003	0.1672	6.5400e-003	0.1738	0.0484	6.2600e-003	0.0546	0.0000	458.4966	458.4966	9.9400e-003	0.0677	478.9105
Worker	0.2631	0.1498	2.3015	7.8600e-003	1.0858	4.3000e-003	1.0901	0.2889	3.9500e-003	0.2928	0.0000	760.2354	760.2354	0.0156	0.0176	765.8598
Total	0.2874	1.2580	2.6302	0.0126	1.2530	0.0108	1.2638	0.3372	0.0102	0.3474	0.0000	1,218.7319	1,218.7319	0.0256	0.0852	1,244.7703

3.5 Building Construction - 2029**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	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2029****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	0.0239	1.1000	0.3264	4.6100e-003	0.1679	6.4800e-003	0.1743	0.0486	6.2000e-003	0.0548	0.0000	449.6219	449.6219	9.8900e-003	0.0663	469.6273
Worker	0.2502	0.1400	2.2197	7.7000e-003	1.0900	4.0400e-003	1.0940	0.2900	3.7200e-003	0.2937	0.0000	749.8669	749.8669	0.0145	0.0170	755.2870
Total	0.2741	1.2400	2.5461	0.0123	1.2578	0.0105	1.2683	0.3385	9.9200e-003	0.3484	0.0000	1,199.4888	1,199.4888	0.0244	0.0833	1,224.9144

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	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2029****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	0.0239	1.1000	0.3264	4.6100e-003	0.1679	6.4800e-003	0.1743	0.0486	6.2000e-003	0.0548	0.0000	449.6219	449.6219	9.8900e-003	0.0663	469.6273
Worker	0.2502	0.1400	2.2197	7.7000e-003	1.0900	4.0400e-003	1.0940	0.2900	3.7200e-003	0.2937	0.0000	749.8669	749.8669	0.0145	0.0170	755.2870
Total	0.2741	1.2400	2.5461	0.0123	1.2578	0.0105	1.2683	0.3385	9.9200e-003	0.3484	0.0000	1,199.4888	1,199.4888	0.0244	0.0833	1,224.9144

3.5 Building Construction - 2030**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	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2030****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	0.0236	1.0947	0.3240	4.5200e-003	0.1679	6.4300e-003	0.1743	0.0486	6.1500e-003	0.0547	0.0000	440.8933	440.8933	9.7900e-003	0.0650	460.5000
Worker	0.2373	0.1314	2.1433	7.5300e-003	1.0900	3.7800e-003	1.0938	0.2900	3.4800e-003	0.2935	0.0000	738.2317	738.2317	0.0135	0.0164	743.4620
Total	0.2609	1.2261	2.4673	0.0121	1.2578	0.0102	1.2680	0.3385	9.6300e-003	0.3482	0.0000	1,179.1249	1,179.1249	0.0233	0.0814	1,203.9620

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	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2030****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	0.0236	1.0947	0.3240	4.5200e-003	0.1679	6.4300e-003	0.1743	0.0486	6.1500e-003	0.0547	0.0000	440.8933	440.8933	9.7900e-003	0.0650	460.5000
Worker	0.2373	0.1314	2.1433	7.5300e-003	1.0900	3.7800e-003	1.0938	0.2900	3.4800e-003	0.2935	0.0000	738.2317	738.2317	0.0135	0.0164	743.4620
Total	0.2609	1.2261	2.4673	0.0121	1.2578	0.0102	1.2680	0.3385	9.6300e-003	0.3482	0.0000	1,179.1249	1,179.1249	0.0233	0.0814	1,203.9620

3.5 Building Construction - 2031**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	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2031****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	0.0234	1.0915	0.3225	4.4500e-003	0.1679	6.4000e-003	0.1743	0.0486	6.1200e-003	0.0547	0.0000	433.2444	433.2444	9.7000e-003	0.0638	452.5010
Worker	0.2244	0.1237	2.0754	7.3700e-003	1.0900	3.5500e-003	1.0935	0.2900	3.2600e-003	0.2932	0.0000	727.8944	727.8944	0.0126	0.0159	732.9608
Total	0.2479	1.2153	2.3980	0.0118	1.2578	9.9500e-003	1.2678	0.3385	9.3800e-003	0.3479	0.0000	1,161.1387	1,161.1387	0.0223	0.0798	1,185.4618

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	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2031****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	0.0234	1.0915	0.3225	4.4500e-003	0.1679	6.4000e-003	0.1743	0.0486	6.1200e-003	0.0547	0.0000	433.2444	433.2444	9.7000e-003	0.0638	452.5010
Worker	0.2244	0.1237	2.0754	7.3700e-003	1.0900	3.5500e-003	1.0935	0.2900	3.2600e-003	0.2932	0.0000	727.8944	727.8944	0.0126	0.0159	732.9608
Total	0.2479	1.2153	2.3980	0.0118	1.2578	9.9500e-003	1.2678	0.3385	9.3800e-003	0.3479	0.0000	1,161.1387	1,161.1387	0.0223	0.0798	1,185.4618

3.5 Building Construction - 2032**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	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3479	344.3479	0.0138	0.0000	344.6933
Total	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3479	344.3479	0.0138	0.0000	344.6933

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2032****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	0.0234	1.0937	0.3231	4.3900e-003	0.1685	6.4000e-003	0.1749	0.0487	6.1200e-003	0.0549	0.0000	428.2332	428.2332	9.6500e-003	0.0630	447.2597
Worker	0.2138	0.1180	2.0251	7.2700e-003	1.0941	3.3400e-003	1.0975	0.2911	3.0700e-003	0.2942	0.0000	721.6248	721.6248	0.0119	0.0156	726.5755
Total	0.2372	1.2117	2.3482	0.0117	1.2627	9.7400e-003	1.2724	0.3398	9.1900e-003	0.3490	0.0000	1,149.8580	1,149.8580	0.0215	0.0787	1,173.8352

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	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3475	344.3475	0.0138	0.0000	344.6929
Total	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3475	344.3475	0.0138	0.0000	344.6929

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2032****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	0.0234	1.0937	0.3231	4.3900e-003	0.1685	6.4000e-003	0.1749	0.0487	6.1200e-003	0.0549	0.0000	428.2332	428.2332	9.6500e-003	0.0630	447.2597
Worker	0.2138	0.1180	2.0251	7.2700e-003	1.0941	3.3400e-003	1.0975	0.2911	3.0700e-003	0.2942	0.0000	721.6248	721.6248	0.0119	0.0156	726.5755
Total	0.2372	1.2117	2.3482	0.0117	1.2627	9.7400e-003	1.2724	0.3398	9.1900e-003	0.3490	0.0000	1,149.8580	1,149.8580	0.0215	0.0787	1,173.8352

3.5 Building Construction - 2033**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	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2033****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	0.0231	1.0839	0.3205	4.3000e-003	0.1672	6.3300e-003	0.1736	0.0484	6.0600e-003	0.0544	0.0000	419.0522	419.0522	9.4900e-003	0.0617	437.6653
Worker	0.2021	0.1121	1.9598	7.0900e-003	1.0858	3.1200e-003	1.0889	0.2889	2.8700e-003	0.2917	0.0000	708.2653	708.2653	0.0111	0.0152	713.0679
Total	0.2252	1.1960	2.2803	0.0114	1.2530	9.4500e-003	1.2625	0.3372	8.9300e-003	0.3462	0.0000	1,127.3174	1,127.3174	0.0206	0.0769	1,150.7332

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	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2033****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	0.0231	1.0839	0.3205	4.3000e-003	0.1672	6.3300e-003	0.1736	0.0484	6.0600e-003	0.0544	0.0000	419.0522	419.0522	9.4900e-003	0.0617	437.6653
Worker	0.2021	0.1121	1.9598	7.0900e-003	1.0858	3.1200e-003	1.0889	0.2889	2.8700e-003	0.2917	0.0000	708.2653	708.2653	0.0111	0.0152	713.0679
Total	0.2252	1.1960	2.2803	0.0114	1.2530	9.4500e-003	1.2625	0.3372	8.9300e-003	0.3462	0.0000	1,127.3174	1,127.3174	0.0206	0.0769	1,150.7332

3.5 Building Construction - 2034**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	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2034****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	0.0231	1.0817	0.3205	4.2500e-003	0.1672	6.3000e-003	0.1735	0.0484	6.0300e-003	0.0544	0.0000	413.6348	413.6348	9.4200e-003	0.0609	432.0028
Worker	0.1929	0.1080	1.9153	6.9900e-003	1.0858	2.9300e-003	1.0887	0.2889	2.7000e-003	0.2916	0.0000	701.4231	701.4231	0.0105	0.0149	706.1339
Total	0.2159	1.1897	2.2358	0.0112	1.2530	9.2300e-003	1.2623	0.3372	8.7300e-003	0.3460	0.0000	1,115.0579	1,115.0579	0.0199	0.0758	1,138.1366

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	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2034****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	0.0231	1.0817	0.3205	4.2500e-003	0.1672	6.3000e-003	0.1735	0.0484	6.0300e-003	0.0544	0.0000	413.6348	413.6348	9.4200e-003	0.0609	432.0028
Worker	0.1929	0.1080	1.9153	6.9900e-003	1.0858	2.9300e-003	1.0887	0.2889	2.7000e-003	0.2916	0.0000	701.4231	701.4231	0.0105	0.0149	706.1339
Total	0.2159	1.1897	2.2358	0.0112	1.2530	9.2300e-003	1.2623	0.3372	8.7300e-003	0.3460	0.0000	1,115.0579	1,115.0579	0.0199	0.0758	1,138.1366

3.5 Building Construction - 2035**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	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2035****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	0.0231	1.0826	0.3218	4.2100e-003	0.1679	6.2900e-003	0.1742	0.0486	6.0200e-003	0.0546	0.0000	410.3234	410.3234	9.3700e-003	0.0603	428.5404
Worker	0.1852	0.1052	1.8841	6.9300e-003	1.0900	2.7800e-003	1.0927	0.2900	2.5600e-003	0.2925	0.0000	698.2661	698.2661	9.9500e-003	0.0148	702.9207
Total	0.2083	1.1878	2.2059	0.0111	1.2578	9.0700e-003	1.2669	0.3385	8.5800e-003	0.3471	0.0000	1,108.5895	1,108.5895	0.0193	0.0751	1,131.4611

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	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2035****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	0.0231	1.0826	0.3218	4.2100e-003	0.1679	6.2900e-003	0.1742	0.0486	6.0200e-003	0.0546	0.0000	410.3234	410.3234	9.3700e-003	0.0603	428.5404
Worker	0.1852	0.1052	1.8841	6.9300e-003	1.0900	2.7800e-003	1.0927	0.2900	2.5600e-003	0.2925	0.0000	698.2661	698.2661	9.9500e-003	0.0148	702.9207
Total	0.2083	1.1878	2.2059	0.0111	1.2578	9.0700e-003	1.2669	0.3385	8.5800e-003	0.3471	0.0000	1,108.5895	1,108.5895	0.0193	0.0751	1,131.4611

3.5 Building Construction - 2036**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	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3479	344.3479	0.0128	0.0000	344.6686
Total	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3479	344.3479	0.0128	0.0000	344.6686

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2036****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	0.0232	1.0867	0.3230	4.2300e-003	0.1685	6.3200e-003	0.1748	0.0488	6.0400e-003	0.0548	0.0000	411.8955	411.8955	9.4100e-003	0.0606	430.1823
Worker	0.1859	0.1056	1.8914	6.9600e-003	1.0941	2.7900e-003	1.0969	0.2911	2.5700e-003	0.2936	0.0000	700.9415	700.9415	9.9900e-003	0.0148	705.6139
Total	0.2091	1.1923	2.2144	0.0112	1.2627	9.1100e-003	1.2718	0.3398	8.6100e-003	0.3484	0.0000	1,112.8370	1,112.8370	0.0194	0.0754	1,135.7962

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	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3475	344.3475	0.0128	0.0000	344.6682
Total	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3475	344.3475	0.0128	0.0000	344.6682

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2036****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	0.0232	1.0867	0.3230	4.2300e-003	0.1685	6.3200e-003	0.1748	0.0488	6.0400e-003	0.0548	0.0000	411.8955	411.8955	9.4100e-003	0.0606	430.1823
Worker	0.1859	0.1056	1.8914	6.9600e-003	1.0941	2.7900e-003	1.0969	0.2911	2.5700e-003	0.2936	0.0000	700.9415	700.9415	9.9900e-003	0.0148	705.6139
Total	0.2091	1.1923	2.2144	0.0112	1.2627	9.1100e-003	1.2718	0.3398	8.6100e-003	0.3484	0.0000	1,112.8370	1,112.8370	0.0194	0.0754	1,135.7962

3.5 Building Construction - 2037**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	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2037****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	0.0231	1.0826	0.3218	4.2100e-003	0.1679	6.2900e-003	0.1742	0.0486	6.0200e-003	0.0546	0.0000	410.3234	410.3234	9.3700e-003	0.0603	428.5404
Worker	0.1852	0.1052	1.8841	6.9300e-003	1.0900	2.7800e-003	1.0927	0.2900	2.5600e-003	0.2925	0.0000	698.2661	698.2661	9.9500e-003	0.0148	702.9207
Total	0.2083	1.1878	2.2059	0.0111	1.2578	9.0700e-003	1.2669	0.3385	8.5800e-003	0.3471	0.0000	1,108.5895	1,108.5895	0.0193	0.0751	1,131.4611

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	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2037****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	0.0231	1.0826	0.3218	4.2100e-003	0.1679	6.2900e-003	0.1742	0.0486	6.0200e-003	0.0546	0.0000	410.3234	410.3234	9.3700e-003	0.0603	428.5404
Worker	0.1852	0.1052	1.8841	6.9300e-003	1.0900	2.7800e-003	1.0927	0.2900	2.5600e-003	0.2925	0.0000	698.2661	698.2661	9.9500e-003	0.0148	702.9207
Total	0.2083	1.1878	2.2059	0.0111	1.2578	9.0700e-003	1.2669	0.3385	8.5800e-003	0.3471	0.0000	1,108.5895	1,108.5895	0.0193	0.0751	1,131.4611

3.5 Building Construction - 2038**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	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2038****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	0.0231	1.0826	0.3218	4.2100e-003	0.1679	6.2900e-003	0.1742	0.0486	6.0200e-003	0.0546	0.0000	410.3234	410.3234	9.3700e-003	0.0603	428.5404
Worker	0.1852	0.1052	1.8841	6.9300e-003	1.0900	2.7800e-003	1.0927	0.2900	2.5600e-003	0.2925	0.0000	698.2661	698.2661	9.9500e-003	0.0148	702.9207
Total	0.2083	1.1878	2.2059	0.0111	1.2578	9.0700e-003	1.2669	0.3385	8.5800e-003	0.3471	0.0000	1,108.5895	1,108.5895	0.0193	0.0751	1,131.4611

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	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2038****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	0.0231	1.0826	0.3218	4.2100e-003	0.1679	6.2900e-003	0.1742	0.0486	6.0200e-003	0.0546	0.0000	410.3234	410.3234	9.3700e-003	0.0603	428.5404
Worker	0.1852	0.1052	1.8841	6.9300e-003	1.0900	2.7800e-003	1.0927	0.2900	2.5600e-003	0.2925	0.0000	698.2661	698.2661	9.9500e-003	0.0148	702.9207
Total	0.2083	1.1878	2.2059	0.0111	1.2578	9.0700e-003	1.2669	0.3385	8.5800e-003	0.3471	0.0000	1,108.5895	1,108.5895	0.0193	0.0751	1,131.4611

3.5 Building Construction - 2039**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	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7193	341.7193	0.0127	0.0000	342.0375
Total	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7193	341.7193	0.0127	0.0000	342.0375

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2039****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	0.0230	1.0784	0.3205	4.2000e-003	0.1672	6.2700e-003	0.1735	0.0484	6.0000e-003	0.0544	0.0000	408.7512	408.7512	9.3400e-003	0.0601	426.8985
Worker	0.1845	0.1048	1.8769	6.9000e-003	1.0858	2.7700e-003	1.0886	0.2889	2.5500e-003	0.2914	0.0000	695.5908	695.5908	9.9100e-003	0.0147	700.2276
Total	0.2075	1.1832	2.1975	0.0111	1.2530	9.0400e-003	1.2621	0.3372	8.5500e-003	0.3458	0.0000	1,104.3420	1,104.3420	0.0193	0.0748	1,127.1260

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	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7189	341.7189	0.0127	0.0000	342.0371
Total	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7189	341.7189	0.0127	0.0000	342.0371

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2039****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	0.0230	1.0784	0.3205	4.2000e-003	0.1672	6.2700e-003	0.1735	0.0484	6.0000e-003	0.0544	0.0000	408.7512	408.7512	9.3400e-003	0.0601	426.8985
Worker	0.1845	0.1048	1.8769	6.9000e-003	1.0858	2.7700e-003	1.0886	0.2889	2.5500e-003	0.2914	0.0000	695.5908	695.5908	9.9100e-003	0.0147	700.2276
Total	0.2075	1.1832	2.1975	0.0111	1.2530	9.0400e-003	1.2621	0.3372	8.5500e-003	0.3458	0.0000	1,104.3420	1,104.3420	0.0193	0.0748	1,127.1260

3.5 Building Construction - 2040**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2040****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2040****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

3.5 Building Construction - 2041**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2041****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2041****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

3.5 Building Construction - 2042**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2042****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2042****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

3.5 Building Construction - 2043**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2043****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2043****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

3.5 Building Construction - 2044**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2044****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2044****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	0.0231	1.0729	0.3226	4.0300e-003	0.1679	6.1900e-003	0.1741	0.0486	5.9300e-003	0.0545	0.0000	392.6775	392.6775	9.0000e-003	0.0577	410.0990
Worker	0.1540	0.0957	1.7547	6.6400e-003	1.0900	2.2100e-003	1.0922	0.2900	2.0300e-003	0.2920	0.0000	679.6448	679.6448	8.0900e-003	0.0142	684.0851
Total	0.1771	1.1686	2.0772	0.0107	1.2578	8.4000e-003	1.2662	0.3385	7.9600e-003	0.3465	0.0000	1,072.3223	1,072.3223	0.0171	0.0719	1,094.1841

3.5 Building Construction - 2045**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	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7194	341.7194	0.0123	0.0000	342.0264
Total	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7194	341.7194	0.0123	0.0000	342.0264

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2045****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	0.0231	1.0673	0.3215	3.9300e-003	0.1672	6.1500e-003	0.1734	0.0484	5.8800e-003	0.0543	0.0000	382.3436	382.3436	8.6900e-003	0.0562	399.3183
Worker	0.1387	0.0921	1.6897	6.5000e-003	1.0858	1.9500e-003	1.0877	0.2889	1.8000e-003	0.2907	0.0000	669.4531	669.4531	7.2200e-003	0.0140	673.7978
Total	0.1618	1.1594	2.0111	0.0104	1.2530	8.1000e-003	1.2611	0.3372	7.6800e-003	0.3449	0.0000	1,051.7967	1,051.7967	0.0159	0.0702	1,073.1162

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	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7190	341.7190	0.0123	0.0000	342.0260
Total	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7190	341.7190	0.0123	0.0000	342.0260

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2045****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	0.0231	1.0673	0.3215	3.9300e-003	0.1672	6.1500e-003	0.1734	0.0484	5.8800e-003	0.0543	0.0000	382.3436	382.3436	8.6900e-003	0.0562	399.3183
Worker	0.1387	0.0921	1.6897	6.5000e-003	1.0858	1.9500e-003	1.0877	0.2889	1.8000e-003	0.2907	0.0000	669.4531	669.4531	7.2200e-003	0.0140	673.7978
Total	0.1618	1.1594	2.0111	0.0104	1.2530	8.1000e-003	1.2611	0.3372	7.6800e-003	0.3449	0.0000	1,051.7967	1,051.7967	0.0159	0.0702	1,073.1162

3.5 Building Construction - 2046**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2046****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	0.0232	1.0714	0.3227	3.9500e-003	0.1679	6.1700e-003	0.1741	0.0486	5.9000e-003	0.0545	0.0000	383.8142	383.8142	8.7300e-003	0.0565	400.8542
Worker	0.1392	0.0925	1.6962	6.5200e-003	1.0900	1.9600e-003	1.0919	0.2900	1.8100e-003	0.2918	0.0000	672.0279	672.0279	7.2400e-003	0.0140	676.3894
Total	0.1624	1.1639	2.0189	0.0105	1.2579	8.1300e-003	1.2660	0.3385	7.7100e-003	0.3462	0.0000	1,055.8421	1,055.8421	0.0160	0.0705	1,077.2435

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2046****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	0.0232	1.0714	0.3227	3.9500e-003	0.1679	6.1700e-003	0.1741	0.0486	5.9000e-003	0.0545	0.0000	383.8142	383.8142	8.7300e-003	0.0565	400.8542
Worker	0.1392	0.0925	1.6962	6.5200e-003	1.0900	1.9600e-003	1.0919	0.2900	1.8100e-003	0.2918	0.0000	672.0279	672.0279	7.2400e-003	0.0140	676.3894
Total	0.1624	1.1639	2.0189	0.0105	1.2579	8.1300e-003	1.2660	0.3385	7.7100e-003	0.3462	0.0000	1,055.8421	1,055.8421	0.0160	0.0705	1,077.2435

3.5 Building Construction - 2047**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2047****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	0.0232	1.0714	0.3227	3.9500e-003	0.1679	6.1700e-003	0.1741	0.0486	5.9000e-003	0.0545	0.0000	383.8142	383.8142	8.7300e-003	0.0565	400.8542
Worker	0.1392	0.0925	1.6962	6.5200e-003	1.0900	1.9600e-003	1.0919	0.2900	1.8100e-003	0.2918	0.0000	672.0279	672.0279	7.2400e-003	0.0140	676.3894
Total	0.1624	1.1639	2.0189	0.0105	1.2579	8.1300e-003	1.2660	0.3385	7.7100e-003	0.3462	0.0000	1,055.8421	1,055.8421	0.0160	0.0705	1,077.2435

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2047****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	0.0232	1.0714	0.3227	3.9500e-003	0.1679	6.1700e-003	0.1741	0.0486	5.9000e-003	0.0545	0.0000	383.8142	383.8142	8.7300e-003	0.0565	400.8542
Worker	0.1392	0.0925	1.6962	6.5200e-003	1.0900	1.9600e-003	1.0919	0.2900	1.8100e-003	0.2918	0.0000	672.0279	672.0279	7.2400e-003	0.0140	676.3894
Total	0.1624	1.1639	2.0189	0.0105	1.2579	8.1300e-003	1.2660	0.3385	7.7100e-003	0.3462	0.0000	1,055.8421	1,055.8421	0.0160	0.0705	1,077.2435

3.5 Building Construction - 2048**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	0.1568	0.9026	2.1115	4.0600e-003		9.6600e-003	9.6600e-003		9.6600e-003	9.6600e-003	0.0000	344.3480	344.3480	0.0124	0.0000	344.6574
Total	0.1568	0.9026	2.1115	4.0600e-003		9.6600e-003	9.6600e-003		9.6600e-003	9.6600e-003	0.0000	344.3480	344.3480	0.0124	0.0000	344.6574

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2048****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	0.0233	1.0755	0.3240	3.9600e-003	0.1685	6.1900e-003	0.1747	0.0488	5.9300e-003	0.0547	0.0000	385.2847	385.2847	8.7600e-003	0.0567	402.3900
Worker	0.1397	0.0928	1.7026	6.5500e-003	1.0941	1.9700e-003	1.0961	0.2911	1.8100e-003	0.2929	0.0000	674.6027	674.6027	7.2700e-003	0.0141	678.9809
Total	0.1630	1.1683	2.0266	0.0105	1.2627	8.1600e-003	1.2708	0.3398	7.7400e-003	0.3476	0.0000	1,059.8874	1,059.8874	0.0160	0.0708	1,081.3709

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	0.1568	0.9026	2.1115	4.0600e-003		9.6600e-003	9.6600e-003		9.6600e-003	9.6600e-003	0.0000	344.3476	344.3476	0.0124	0.0000	344.6569
Total	0.1568	0.9026	2.1115	4.0600e-003		9.6600e-003	9.6600e-003		9.6600e-003	9.6600e-003	0.0000	344.3476	344.3476	0.0124	0.0000	344.6569

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2048****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	0.0233	1.0755	0.3240	3.9600e-003	0.1685	6.1900e-003	0.1747	0.0488	5.9300e-003	0.0547	0.0000	385.2847	385.2847	8.7600e-003	0.0567	402.3900
Worker	0.1397	0.0928	1.7026	6.5500e-003	1.0941	1.9700e-003	1.0961	0.2911	1.8100e-003	0.2929	0.0000	674.6027	674.6027	7.2700e-003	0.0141	678.9809
Total	0.1630	1.1683	2.0266	0.0105	1.2627	8.1600e-003	1.2708	0.3398	7.7400e-003	0.3476	0.0000	1,059.8874	1,059.8874	0.0160	0.0708	1,081.3709

3.5 Building Construction - 2049**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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2049****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	0.0232	1.0714	0.3227	3.9500e-003	0.1679	6.1700e-003	0.1741	0.0486	5.9000e-003	0.0545	0.0000	383.8142	383.8142	8.7300e-003	0.0565	400.8542
Worker	0.1392	0.0925	1.6962	6.5200e-003	1.0900	1.9600e-003	1.0919	0.2900	1.8100e-003	0.2918	0.0000	672.0279	672.0279	7.2400e-003	0.0140	676.3894
Total	0.1624	1.1639	2.0189	0.0105	1.2579	8.1300e-003	1.2660	0.3385	7.7100e-003	0.3462	0.0000	1,055.8421	1,055.8421	0.0160	0.0705	1,077.2435

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	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2049****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	0.0232	1.0714	0.3227	3.9500e-003	0.1679	6.1700e-003	0.1741	0.0486	5.9000e-003	0.0545	0.0000	383.8142	383.8142	8.7300e-003	0.0565	400.8542
Worker	0.1392	0.0925	1.6962	6.5200e-003	1.0900	1.9600e-003	1.0919	0.2900	1.8100e-003	0.2918	0.0000	672.0279	672.0279	7.2400e-003	0.0140	676.3894
Total	0.1624	1.1639	2.0189	0.0105	1.2579	8.1300e-003	1.2660	0.3385	7.7100e-003	0.3462	0.0000	1,055.8421	1,055.8421	0.0160	0.0705	1,077.2435

3.5 Building Construction - 2050**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	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7194	341.7194	0.0123	0.0000	342.0264
Total	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7194	341.7194	0.0123	0.0000	342.0264

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2050****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	0.0231	1.0662	0.3174	3.8900e-003	0.1673	6.1300e-003	0.1734	0.0484	5.8700e-003	0.0543	0.0000	378.4884	378.4884	8.4600e-003	0.0557	395.3039
Worker	0.1336	0.0920	1.6725	6.4500e-003	1.0858	1.8600e-003	1.0877	0.2889	1.7100e-003	0.2906	0.0000	666.5923	666.5923	6.9600e-003	0.0139	670.9194
Total	0.1568	1.1581	1.9898	0.0103	1.2530	7.9900e-003	1.2610	0.3372	7.5800e-003	0.3448	0.0000	1,045.0807	1,045.0807	0.0154	0.0697	1,066.2232

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	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7190	341.7190	0.0123	0.0000	342.0260
Total	0.1556	0.8957	2.0954	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.7190	341.7190	0.0123	0.0000	342.0260

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2050****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	0.0231	1.0662	0.3174	3.8900e-003	0.1673	6.1300e-003	0.1734	0.0484	5.8700e-003	0.0543	0.0000	378.4884	378.4884	8.4600e-003	0.0557	395.3039
Worker	0.1336	0.0920	1.6725	6.4500e-003	1.0858	1.8600e-003	1.0877	0.2889	1.7100e-003	0.2906	0.0000	666.5923	666.5923	6.9600e-003	0.0139	670.9194
Total	0.1568	1.1581	1.9898	0.0103	1.2530	7.9900e-003	1.2610	0.3372	7.5800e-003	0.3448	0.0000	1,045.0807	1,045.0807	0.0154	0.0697	1,066.2232

3.5 Building Construction - 2051**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	0.0347	0.1998	0.4674	9.0000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	76.2297	76.2297	2.7400e-003	0.0000	76.2982
Total	0.0347	0.1998	0.4674	9.0000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	76.2297	76.2297	2.7400e-003	0.0000	76.2982

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2051****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
Vendor					0.0262	0.0000	0.0262	6.4400e-003	0.0000	6.4400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.2093	0.0000	0.2093	0.0514	0.0000	0.0514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.2355	0.0000	0.2355	0.0578	0.0000	0.0578	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0347	0.1998	0.4674	9.0000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	76.2296	76.2296	2.7400e-003	0.0000	76.2981
Total	0.0347	0.1998	0.4674	9.0000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	76.2296	76.2296	2.7400e-003	0.0000	76.2981

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2051****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
Vendor					0.0262	0.0000	0.0262	6.4400e-003	0.0000	6.4400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.2093	0.0000	0.2093	0.0514	0.0000	0.0514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.2355	0.0000	0.2355	0.0578	0.0000	0.0578	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2051**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	0.1021	0.3693	1.5976	2.8300e-003		0.0118	0.0118		0.0118	0.0118	0.0000	243.4051	243.4051	8.1800e-003	0.0000	243.6096
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1021	0.3693	1.5976	2.8300e-003		0.0118	0.0118		0.0118	0.0118	0.0000	243.4051	243.4051	8.1800e-003	0.0000	243.6096

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2051****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
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
Worker					0.0103	0.0000	0.0103	2.5400e-003	0.0000	2.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0103	0.0000	0.0103	2.5400e-003	0.0000	2.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.1021	0.3693	1.5976	2.8300e-003		0.0118	0.0118		0.0118	0.0118	0.0000	243.4048	243.4048	8.1800e-003	0.0000	243.6093
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1021	0.3693	1.5976	2.8300e-003		0.0118	0.0118		0.0118	0.0118	0.0000	243.4048	243.4048	8.1800e-003	0.0000	243.6093

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2051****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
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
Worker					0.0103	0.0000	0.0103	2.5400e-003	0.0000	2.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0103	0.0000	0.0103	2.5400e-003	0.0000	2.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2052**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	0.1203	0.4351	1.8823	3.3400e-003		0.0139	0.0139		0.0139	0.0139	0.0000	286.7842	286.7842	9.6400e-003	0.0000	287.0252
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1203	0.4351	1.8823	3.3400e-003		0.0139	0.0139		0.0139	0.0139	0.0000	286.7842	286.7842	9.6400e-003	0.0000	287.0252

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2052****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
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
Worker					0.0122	0.0000	0.0122	2.9900e-003	0.0000	2.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0122	0.0000	0.0122	2.9900e-003	0.0000	2.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.1203	0.4351	1.8823	3.3400e-003		0.0139	0.0139		0.0139	0.0139	0.0000	286.7839	286.7839	9.6400e-003	0.0000	287.0249
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1203	0.4351	1.8823	3.3400e-003		0.0139	0.0139		0.0139	0.0139	0.0000	286.7839	286.7839	9.6400e-003	0.0000	287.0249

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2052****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
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
Worker					0.0122	0.0000	0.0122	2.9900e-003	0.0000	2.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0122	0.0000	0.0122	2.9900e-003	0.0000	2.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2052**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	0.9287					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3800e-003	8.7200e-003	0.0215	4.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	3.0639	3.0639	1.1000e-004	0.0000	3.0666
Total	0.9301	8.7200e-003	0.0215	4.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	3.0639	3.0639	1.1000e-004	0.0000	3.0666

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2052****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
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
Worker					0.0173	0.0000	0.0173	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0173	0.0000	0.0173	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.9287					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3800e-003	8.7200e-003	0.0215	4.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	3.0639	3.0639	1.1000e-004	0.0000	3.0666
Total	0.9301	8.7200e-003	0.0215	4.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	3.0639	3.0639	1.1000e-004	0.0000	3.0666

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2052****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
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
Worker					0.0173	0.0000	0.0173	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0173	0.0000	0.0173	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2053**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	10.1001					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.0949	0.2339	3.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	33.3200	33.3200	1.1700e-003	0.0000	33.3493
Total	10.1151	0.0949	0.2339	3.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	33.3200	33.3200	1.1700e-003	0.0000	33.3493

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2053****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
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
Worker					0.1880	0.0000	0.1880	0.0461	0.0000	0.0461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.1880	0.0000	0.1880	0.0461	0.0000	0.0461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	10.1001					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.0949	0.2339	3.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	33.3199	33.3199	1.1700e-003	0.0000	33.3492
Total	10.1151	0.0949	0.2339	3.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	33.3199	33.3199	1.1700e-003	0.0000	33.3492

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2053****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
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
Worker					0.1880	0.0000	0.1880	0.0461	0.0000	0.0461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.1880	0.0000	0.1880	0.0461	0.0000	0.0461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2054**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	5.9981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9000e-003	0.0563	0.1389	2.3000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	19.7877	19.7877	7.0000e-004	0.0000	19.8051
Total	6.0070	0.0563	0.1389	2.3000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	19.7877	19.7877	7.0000e-004	0.0000	19.8051

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2054****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
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
Worker					0.1116	0.0000	0.1116	0.0274	0.0000	0.0274	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.1116	0.0000	0.1116	0.0274	0.0000	0.0274	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	5.9981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9000e-003	0.0563	0.1389	2.3000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	19.7877	19.7877	7.0000e-004	0.0000	19.8051
Total	6.0070	0.0563	0.1389	2.3000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	19.7877	19.7877	7.0000e-004	0.0000	19.8051

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2054****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
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
Worker					0.1116	0.0000	0.1116	0.0274	0.0000	0.0274	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.1116	0.0000	0.1116	0.0274	0.0000	0.0274	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Increase Density

Integrate Below Market Rate Housing

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					
Mitigated	4.0952	4.0161	36.0825	0.0688	8.7135	0.0463	8.7599	2.3282	0.0432	2.3714	0.0000	6,743.2805	6,743.2805	0.4607	0.3388	6,855.7688
Unmitigated	4.0598	3.9594	35.5791	0.0674	8.5277	0.0455	8.5732	2.2786	0.0424	2.3210	0.0000	6,605.9977	6,605.9977	0.4552	0.3340	6,716.9131

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	8,073.96	8,978.42	6926.84	12,516,384	12,789,155
Single Family Housing	6,900.64	6,973.74	6250.05	10,615,170	10,846,508
Total	14,974.60	15,952.16	13,176.89	23,131,554	23,635,663

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
Apartments Low Rise	7.00	3.60	3.90	31.00	15.00	54.00	86	11	3
Single Family Housing	7.00	3.60	3.90	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.555274	0.059572	0.187289	0.120548	0.022031	0.005855	0.011319	0.007376	0.000945	0.000497	0.025792	0.000881	0.002622
Single Family Housing	0.555274	0.059572	0.187289	0.120548	0.022031	0.005855	0.011319	0.007376	0.000945	0.000497	0.025792	0.000881	0.002622

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable 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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,336.059 9	1,336.059 9	0.1520	0.0184	1,345.353 1
NaturalGas Mitigated	0.2682	2.2918	0.9752	0.0146		0.1853	0.1853		0.1853	0.1853	0.0000	2,654.115 7	2,654.115 7	0.0509	0.0487	2,669.887 8
NaturalGas Unmitigated	0.2682	2.2918	0.9752	0.0146		0.1853	0.1853		0.1853	0.1853	0.0000	2,654.115 7	2,654.115 7	0.0509	0.0487	2,669.887 8

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
Apartments Low Rise	2.15261e+007	0.1161	0.9919	0.4221	6.3300e-003		0.0802	0.0802		0.0802	0.0802	0.0000	1,148.7161	1,148.7161	0.0220	0.0211	1,155.5423
Single Family Housing	2.82101e+007	0.1521	1.2999	0.5531	8.3000e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,505.3996	1,505.3996	0.0289	0.0276	1,514.3455
Total		0.2682	2.2918	0.9752	0.0146		0.1853	0.1853		0.1853	0.1853	0.0000	2,654.1157	2,654.1157	0.0509	0.0487	2,669.8878

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					
Apartments Low Rise	2.15261e+007	0.1161	0.9919	0.4221	6.3300e-003		0.0802	0.0802		0.0802	0.0802	0.0000	1,148.7161	1,148.7161	0.0220	0.0211	1,155.5423
Single Family Housing	2.82101e+007	0.1521	1.2999	0.5531	8.3000e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,505.3996	1,505.3996	0.0289	0.0276	1,514.3455
Total		0.2682	2.2918	0.9752	0.0146		0.1853	0.1853		0.1853	0.1853	0.0000	2,654.1157	2,654.1157	0.0509	0.0487	2,669.8878

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.44813e+006	585.0752	0.0666	8.0700e-003	589.1448
Single Family Housing	5.70949e+006	750.9847	0.0855	0.0104	756.2083
Total		1,336.0599	0.1520	0.0184	1,345.3531

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	11.5600	0.1941	13.5976	9.6000e-004		0.0786	0.0786		0.0786	0.0786	0.0000	65.7133	65.7133	0.0220	8.0000e-004	66.5014
Unmitigated	11.5600	0.1941	13.5976	9.6000e-004		0.0786	0.0786		0.0786	0.0786	0.0000	65.7133	65.7133	0.0220	8.0000e-004	66.5014

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	1.7027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.4466					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.3900e-003	0.0375	0.0160	2.4000e-004		3.0300e-003	3.0300e-003		3.0300e-003	3.0300e-003	0.0000	43.4690	43.4690	8.3000e-004	8.0000e-004	43.7274
Landscaping	0.4062	0.1566	13.5817	7.2000e-004		0.0755	0.0755		0.0755	0.0755	0.0000	22.2442	22.2442	0.0212	0.0000	22.7740
Total	11.5599	0.1941	13.5976	9.6000e-004		0.0786	0.0786		0.0786	0.0786	0.0000	65.7133	65.7133	0.0220	8.0000e-004	66.5014

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****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	1.7027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.4466					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.3900e-003	0.0375	0.0160	2.4000e-004		3.0300e-003	3.0300e-003		3.0300e-003	3.0300e-003	0.0000	43.4690	43.4690	8.3000e-004	8.0000e-004	43.7274
Landscaping	0.4062	0.1566	13.5817	7.2000e-004		0.0755	0.0755		0.0755	0.0755	0.0000	22.2442	22.2442	0.0212	0.0000	22.7740
Total	11.5599	0.1941	13.5976	9.6000e-004		0.0786	0.0786		0.0786	0.0786	0.0000	65.7133	65.7133	0.0220	8.0000e-004	66.5014

7.0 Water Detail**7.1 Mitigation Measures Water**

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	157.6353	3.9073	0.0936	283.2072
Unmitigated	157.6353	3.9073	0.0936	283.2072

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	71.8649 / 45.3061	94.8047	2.3499	0.0563	170.3258
Single Family Housing	47.6276 / 30.0261	62.8307	1.5574	0.0373	112.8814
Total		157.6353	3.9073	0.0936	283.2072

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	71.8649 / 45.3061	94.8047	2.3499	0.0563	170.3258
Single Family Housing	47.6276 / 30.0261	62.8307	1.5574	0.0373	112.8814
Total		157.6353	3.9073	0.0936	283.2072

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	281.2643	16.6222	0.0000	696.8203
Unmitigated	281.2643	16.6222	0.0000	696.8203

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	507.38	102.9936	6.0867	0.0000	255.1622
Single Family Housing	878.22	178.2707	10.5355	0.0000	441.6582
Total		281.2643	16.6222	0.0000	696.8203

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	507.38	102.9936	6.0867	0.0000	255.1622
Single Family Housing	878.22	178.2707	10.5355	0.0000	441.6582
Total		281.2643	16.6222	0.0000	696.8203

9.0 Operational Offroad

Barry Miller Moraga GP and HE EIR - GHG Buildout - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

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

Equipment Type	Number
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11.0 Vegetation

Appendix E

Energy Calculation Sheets

Barry Miller Moraga GP and HE

9/

Populate one of the following tables (Leave the other blank):

Annual VMT	OR	Daily Vehicle Trips
Annual VMT: 23,131,554		Daily Vehicle Trips: Average Trip Distance:

Fleet Class	Fleet Mix	Fuel Economy (MPG) [1]	
Light Duty Auto (LDA)	0.541709	Passenger Vehicles	25.3
Light Duty Truck 1 (LDT1)	0.062136	Light-Med Duty Trucks	18.2
Light Duty Truck 2 (LDT2)	0.185590	Heavy Trucks/Other	7.6
Medium Duty Vehicle (MDV)	0.128486	Motorcycles	44
Light Heavy Duty 1 (LHD1)	0.023783		
Light Heavy Duty 2 (LHD2)	0.006533		
Medium Heavy Duty (MHD)	0.012157		
Heavy Heavy Duty (HHD)	0.009216		
Other Bus (OBUS)	0.000814		
Urban Bus (UBUS)	0.000297		
Motorcycle (MCY)	0.024669		
School Bus (SBUS)	0.000753		
Motorhome (MH)	0.003657		

Fleet Mix					
Vehicle Type	Percent	Fuel Type	Annual VMT: VMT	Vehicle Trips: VMT	Fuel Consumption (Gallons)
Passenger Vehicles	54.17%	Gasoline	12,530,571	0.00	495,279
Light-Medium Duty Trucks	37.62%	Gasoline	8,702,368	0.00	478,152
Heavy Trucks/Other	5.72%	Diesel	1,323,356	0.00	174,126
Motorcycle	2.47%	Gasoline	570,632	0.00	12,969

62966

Total Gasoline Consumption (gallons)	986,401
Total Diesel Consumption (gallons)	174,126

Sources:

[1] United States Department of Transportation, Bureau of Transportation Statistics. 2021. National Transportation Statistics. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.