CITY OF KINGSBURG

KINGS ESTATES V

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

OCTOBER 2024

PREPARED FOR:
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Kingsburg, CA 93631

PREPARED BY:
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ACRONYMS & ABBREVIATIONS

AB ---------- Assembly Bill
ALS ---------- Advanced Life Support
APN ---------- Assessor's Parcel Number
BPS ---------- Best Performance Standards
CalEEMod ---------- California Emissions Estimator Modeling (software)
CalFire ---------- California Department of Forestry and Fire Protection
CARB ---------- California Air Resources Board
CCAA ---------- California Clean Air Act
CEQA ---------- California Environmental Quality Act
CFCs ---------- Cholorfluorocarbons
CFD ---------- Community Facilities District
CGS ---------- California Geologic Survey
CH_4 ---------- Methane
CHRIS ---------- California Historical Resources Information System
City ---------- City of Kingsburg
CO ---------- Carbone Monoxide
CO_2 ---------- Carbon dioxide
CO_2e ---------- Carbon dioxide equivalent
County ---------- County of Fresno
DOC ---------- Department of Conservation
DTSC ---------- Department of Toxic Substances Control
EIR ---------- Environmental Impact Report
FEMA ---------- Federal Emergency Management Agency
FMMP ---------- Farmland Mapping and Monitoring Program
Fresno LAFCo ---------- Fresno Local Agency Formation Commission
GHG ---------- Greenhouse Gas
GSA ---------- Groundwater Sustainability Agency
GWP ---------- Global Warming Potential
HFCs ---------- Hydrofluorocarbons
IS ---------- Initial Study
IS/MND ---------- Initial Study/Mitigated Negative Declaration
km ---------- kilometers
MMRP ---------- Mitigation Monitoring and Reporting Program
MND ---------- Mitigated Negative Declaration
MRZ ---------- Mineral Resource Zone
MT ---------- Metric Tons
N_2O ---------- Nitrous Oxide
NAHC ---------- Native American Heritage Commission
ND ---------- Negative Declaration
NO_2 ---------- Nitrogen dioxide
NOx ---------- Oxides of nitrogen
O_3 ---------- Ozone
Pb ---------- Lead
PFCs ---------- Perfluorocarbons
PG&E ---------- Pacific Gas& Electric Company
PM_{10} ---------- particulate matter 10 microns in size
$PM_{2.5}$ ---------- particulate matter 2.5 microns in size
ppb ---------- parts per billion

ppm ---------- parts per million
Project ---------- Kings Estates V
R-1-7 ---------- R-1-7 Single Family Zone District
ROG ---------- Reactive Organic Gases
RTP ---------- Regional Transportation Plan
SJVAB ---------- San Joaquin Valley Air Basin
SJVAPCD ---------- San Joaquin Valley Air Pollution Control District
SKFCSD ---------- Selma Kingsburg Fowler County Sanitation District
SO_2 ---------- Sulfur Dioxide
SSJVIC ---------- Southern San Joaquin Valley Information Center
SR ---------- State Route
SRA ---------- State Responsibility Area
SWPPP ---------- Storm Water Pollution Prevention Plan
SWRCB ---------- State Water Resources Control Board
TSM ---------- Tentative Subdivision Map
USEPA ---------- United States Environmental Protection Agency
UST ---------- underground storage tank
UWMP ---------- Urban Water Management Plan
µg/m3 ---------- micrograms per cubic meter

CHAPTER 1 INTRODUCTION

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Kingsburg (City) to address the environmental effects of the Kings Estates V Project (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. The City is the CEQA lead agency for this Project.

The site and the Project are described in detail in Chapter 2 Project Description.

1.1 REGULATORY INFORMATION

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, *et seq.*)-- also known as the CEQA Guidelines--Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or *mitigated* ND (MND) shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or
b. The IS identified potentially significant effects, but:
    1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and
    2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.

1.2 DOCUMENT FORMAT

This IS/MND contains six chapters. Chapter 1 Introduction, provides an overview of the Project and the CEQA process. Chapter 2 Project Description, provides a detailed description of proposed Project components and objectives. Chapter 3 Determination, which is the Lead Agency's determination based upon this initial evaluation. Chapter 4 Environmental Impact Analysis presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 5 Mitigation, Monitoring, and Reporting Program (MMRP), provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation. Chapter 6 details the documents and reports this document relies upon to provide its analysis.

The Air Quality and Greenhouse Gas Emissions Model, Biological Resources Information, Cultural Resources Information, and Vehicle Miles Traveled Memo are provided as technical Appendix A, Appendix B, Appendix C, and Appendix D respectively at the end of this document.

CHAPTER 2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

2.1.1 PROJECT TITLE

Kings Estates V

2.1.2 LEAD AGENCY NAME AND ADDRESS

City of Kingsburg
1401 Draper Street
Kingsburg, CA, 93631

2.1.3 CONTACT PERSON AND PHONE NUMBER

Holly Owen
Community Development Director
(559) 897-5328

2.1.4 CEQA CONSULTANT

Provost & Pritchard Consulting Group
Wyatt Czeshinski, Environmental Project Manager
(559) 449-2700

2.1.5 PROJECT LOCATION

The Project is located immediately north of the city limits of Kingsburg, California, approximately 19 miles southeast of Fresno and 20 miles northwest of Visalia (see Figure 2-1 and Figure 2-2). The Project site is comprised of Assessor's Parcel Numbers (APN) 393-121-37, -42, -43, and -46. The centroid of the Project site is 36° 32' 16.04" N, 119° 33' 08.27" W.

2.1.6 GENERAL PLAN DESIGNATION AND ZONING

The Project site is designated Low Density Residential by the City's General Plan and is currently zoned Exclusive Agriculture (20 acres) by the County of Fresno (County).[1] [2]

2.1.7 DESCRIPTION OF THE PROJECT

West Star Construction Company, Inc. has proposed a new Tentative Subdivision Map (TSM) on a site to the north of the current Kingsburg city limits, comprising of three parcels, approximately 33.27 acres in size (APNs 393-121-37, -42, & -43). In order for the Project to be developed within the City of Kingsburg, each of the aforementioned parcels would be required to be annexed into the City of Kingsburg. Additionally, a fourth parcel, APN 393-121-46 (9.25 acres in size), would be annexed into the Kingsburg city limits as a part of the Project, however this parcel has not been proposed for development at this time. The parcels that would be developed have historically been used for agricultural use. Currently the site contains one single-family residence that would be demolished as a part of the Project. APN 393-121-37 is comprised of natural vegetation, APN 393-121-42 currently contains vineyards that would be removed as a part of the Project, and APN 393-121-43 contains a single-family residence that would be demolished, along with any trees and

[1] (City of Kingsburg, 2014)
[2] (County of Fresno, 2024)

other vegetation surrounding it. The Project involves several approvals, each described in more detail below.

2.1.7.1 TENTATIVE SUBDIVISION MAP

The proposed TSM would result in the subdivision of the site into 97 single-family residential lots, ranging from approximately 7,360 square feet (sqft) in size, to approximately 13,256 sqft in size. The proposed subdivision would be made up of a mix of one- and two-story homes. Additionally, the TSM proposes an approximately 43,477 sqft park (0.99 acres) and an approximately 58,411 sqft basin (1.34 acres) that would serve the residential Project. The proposed stormwater basin would connect to an existing basin immediately south of the site. The TSM proposes vehicular connection points to South Mendocino Avenue at two locations to the east, as well as connection to 14th Avenue and 17th Avenue at two locations to the south. Internally, the proposed subdivision would include streets of 60 feet in width and alleyways of 16 feet in width. Additionally, land is proposed for right of way dedication along South Mendocino Avenue at a width of 48 feet. The site is located on land designated as Low Density Residential by the City of Kingsburg General Plan. The TSM would be developed meeting the density requirements of the Low Density Residential land use.

2.1.7.2 PLANNED UNIT DEVELOPMENT

Planned Unit Developments allow for flexibility when it comes to zoning standards in order to produce a more aesthetically pleasing, functional, and harmonious living environment. The Project would be approved as a Planned Unit Development, allowing it to be developed in a manner which allows for design to deviate from the strict enforcement of the zoning ordinance, however it will provide a finished product that enhances the character of the site more so than if the Project were developed strictly following the zone district requirements. With approval of a Planned Unit Development, the TSM may be developed to standards that differ the base zone district standards for site area, dimensions, coverage, yard space, setbacks, and parking.

2.1.7.3 PREZONING

As previously mentioned, the Project site is not currently located within the Kingsburg City limits. As a result, in tandem with being annexed to the City of Kingsburg, the Project site must be prezoned to a City zoning district. Each of the four parcels that would be annexed into the City are designated as Low Density Residential land uses by the City's General Plan. As a result, the Project would Prezone these four parcels to the R-1-7 zone district from their existing County of Fresno Exclusive Agricultural designation. The R-1-7 zone district is consistent with the site's Low Density Residential land use designation.

2.1.7.4 ANNEXATION

Upon approval of the Project by the City of Kingsburg City Council, the annexation of the Project site would be initiated with the Fresno County Local Agency Formation Commission (Fresno LAFCo). The entire four parcel, 42.52-acre site would be annexed into the City of Kingsburg. Additionally, the Project site would detach from the Kings River Conservation District, Fresno County Fire Protection District, and the Consolidated Irrigation District. With annexation to the City of Kingsburg, the Project site would also be annexed into the City of Kingsburg Community Facilities District (CFD), providing public services to the site. The CFD provides police, fire, ambulance, emergency response, park and open space, lighting and landscaping services and facilities.

2.1.8 SITE AND SURROUNDING LAND USES AND SETTINGS

Table 2-1: Existing Uses, General Plan Designation, & Zone Districts of Surrounding Properties

Direction from Project Site	Existing Use	General Plan Designation	Zone District
NORTH	Agriculture and vacant	Agriculture (County)	AE-20 - Exclusive Agriculture (County)
EAST	Agriculture and vacant	Low Density Residential	AE-20 - Exclusive Agriculture (County) and R-1-7
SOUTH	Residential neighborhood and open space	Low Density Residential and Open Space	RCO Open Space and R-1-7
WEST	Agriculture and vacant	Low Density Residential and Semi Public	AE-20 - Exclusive Agriculture (County)

2.1.9 OTHER PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED

- County of Fresno
- Fresno Local Agency Formation Commission
- San Joaquin Valley Air Pollution Control District

2.1.10 CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Public Resources Code Section 21080.3.1, *et seq. (codification of Assembly Bill [AB] 52, 2013-14)*) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

The City of Kingsburg has not received any written correspondence from a Tribe pursuant to Public Resources Code Section 21080.3.1 requesting notification of proposed Project.

Figure 2-1: Regional Location Map

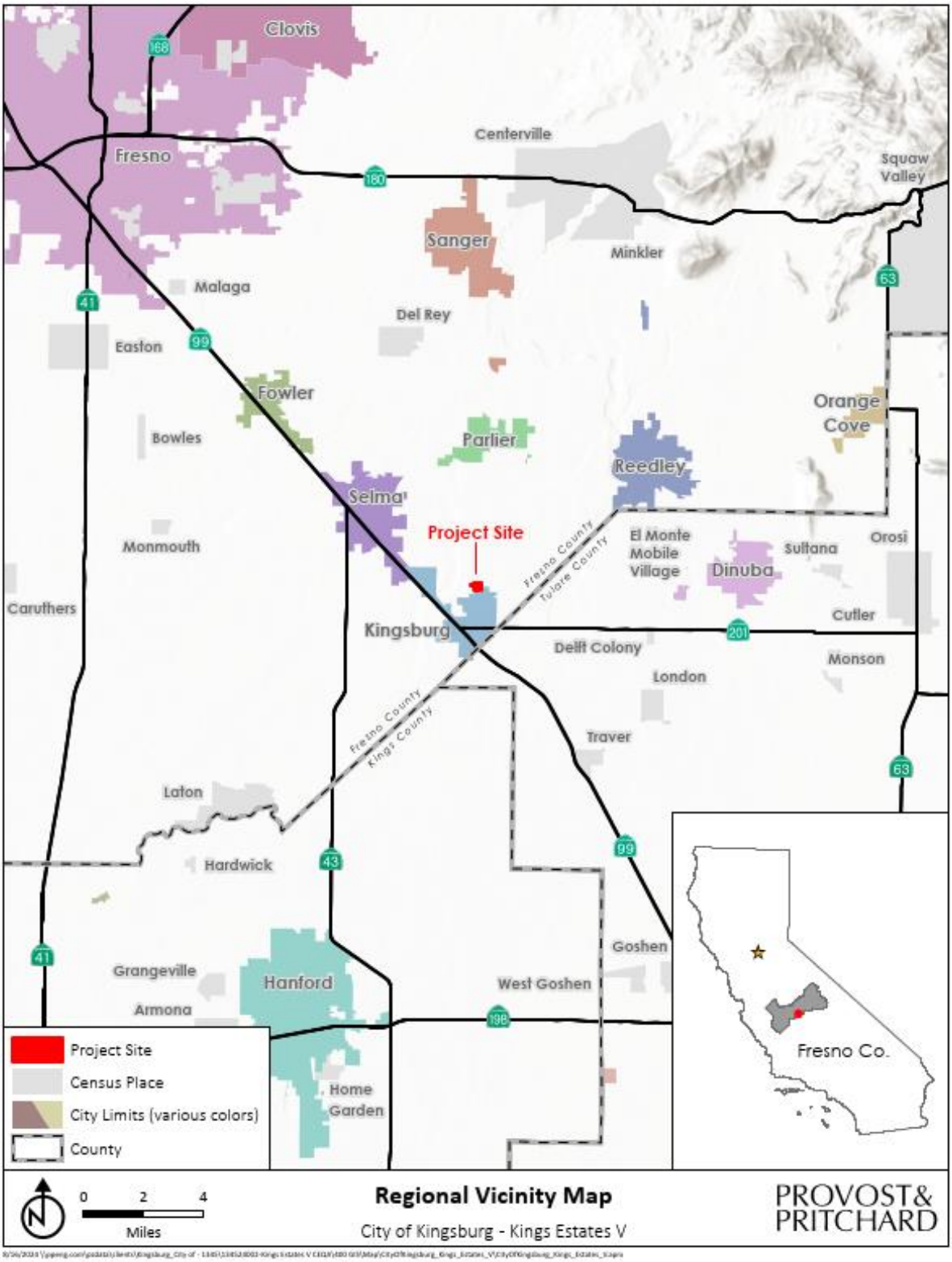


Figure 2-2: Aerial Map

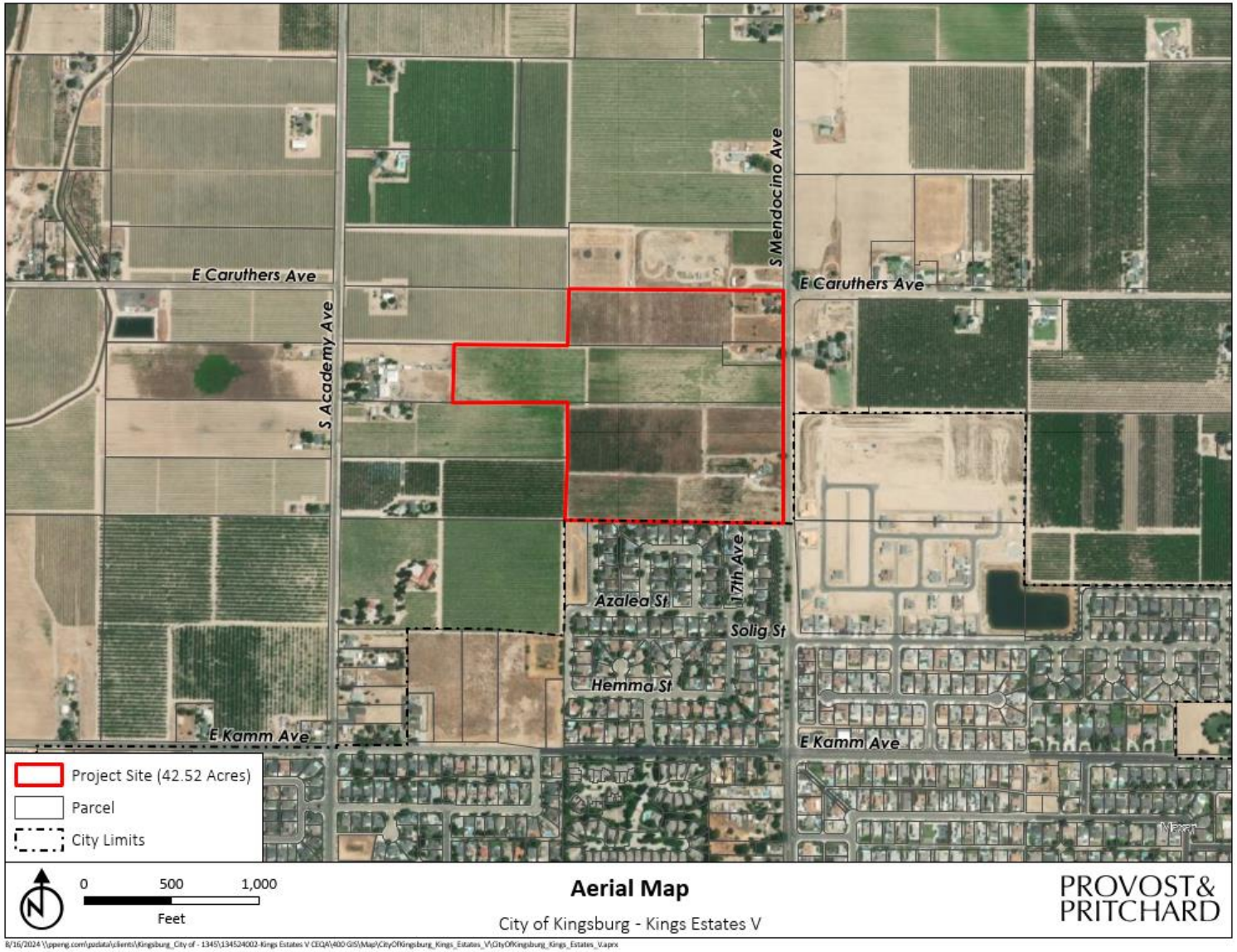


Figure 2-3: Topo Quad Map

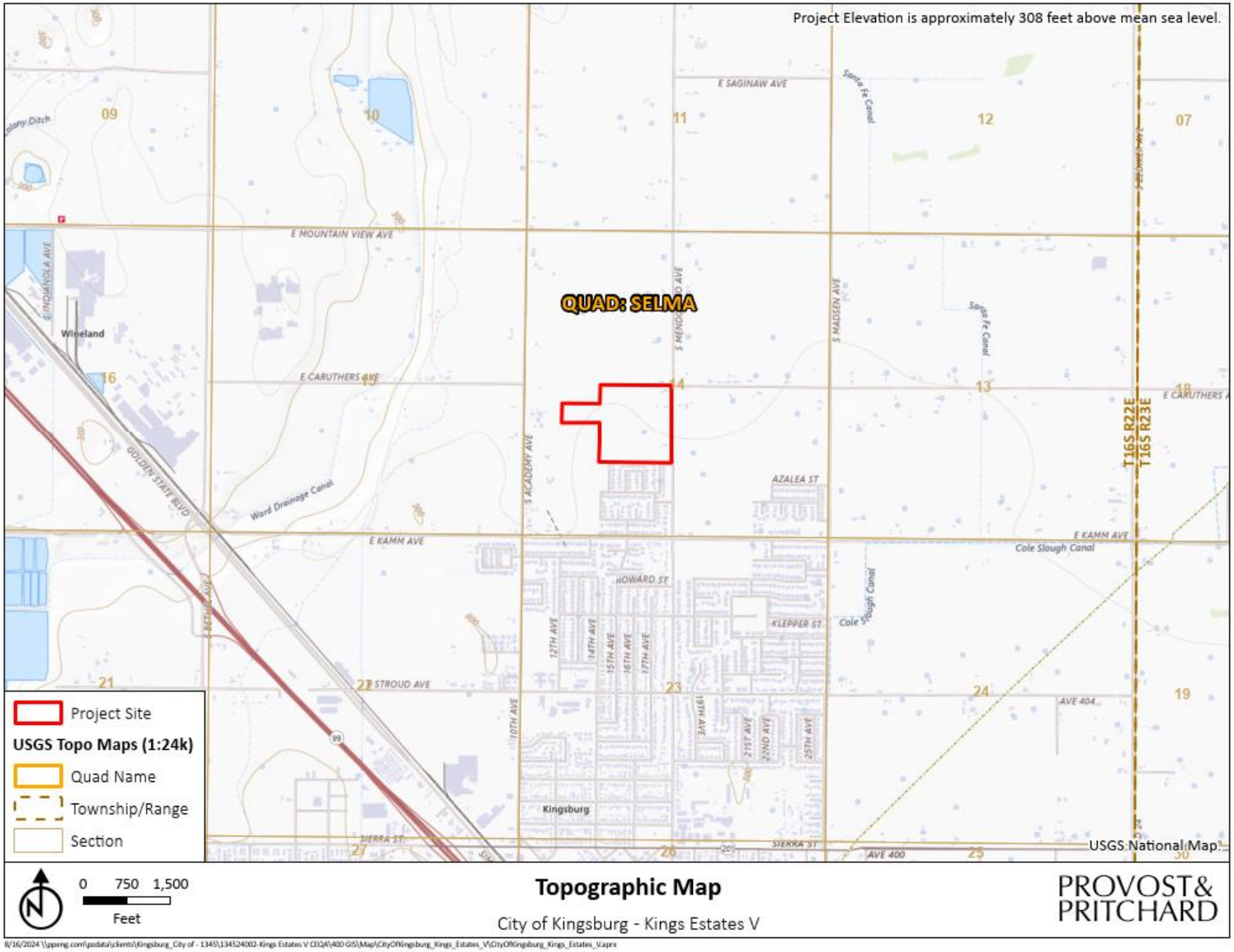


Figure 2-4: General Plan Land Use Designation Map

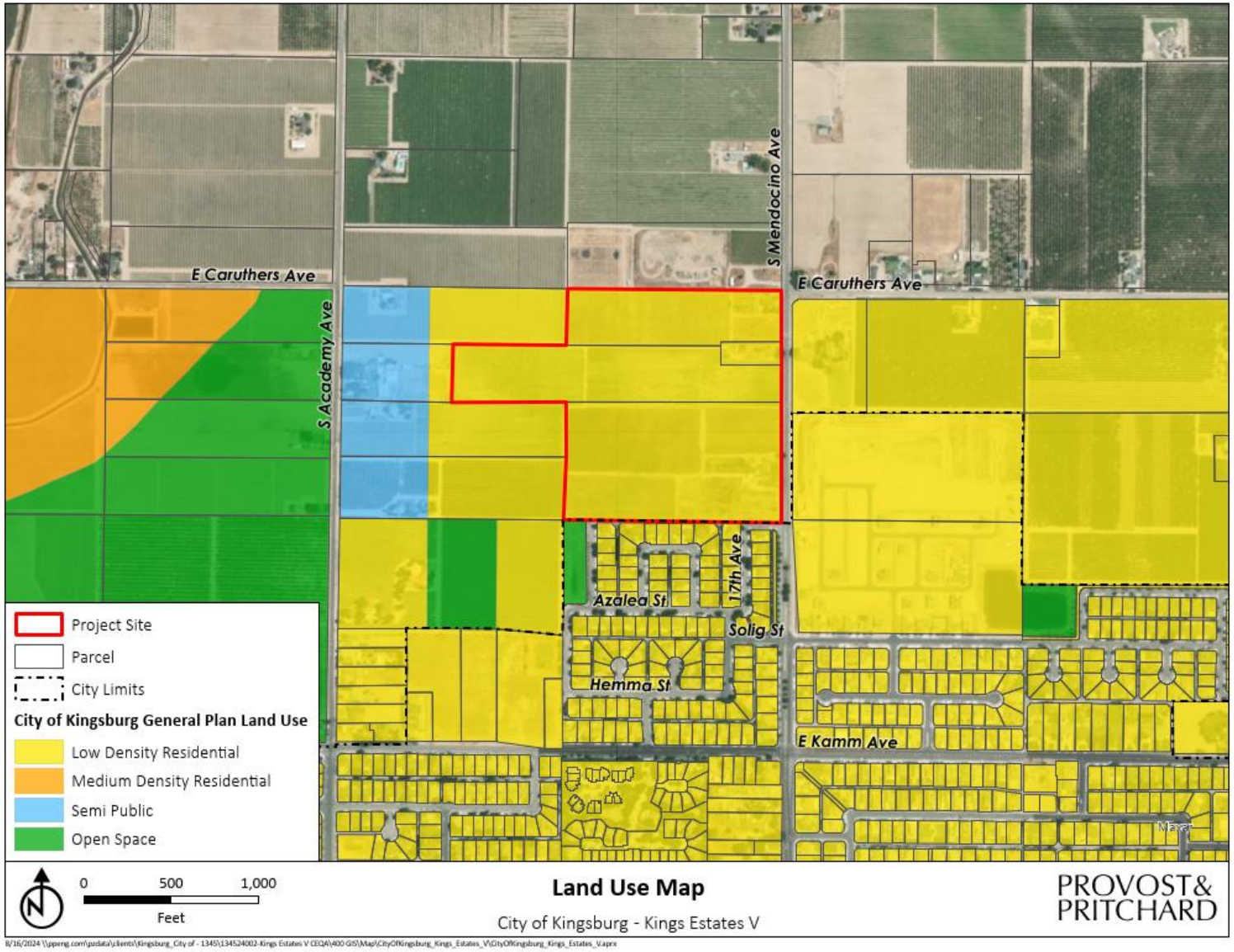


Figure 2-5: Current Zone District Map

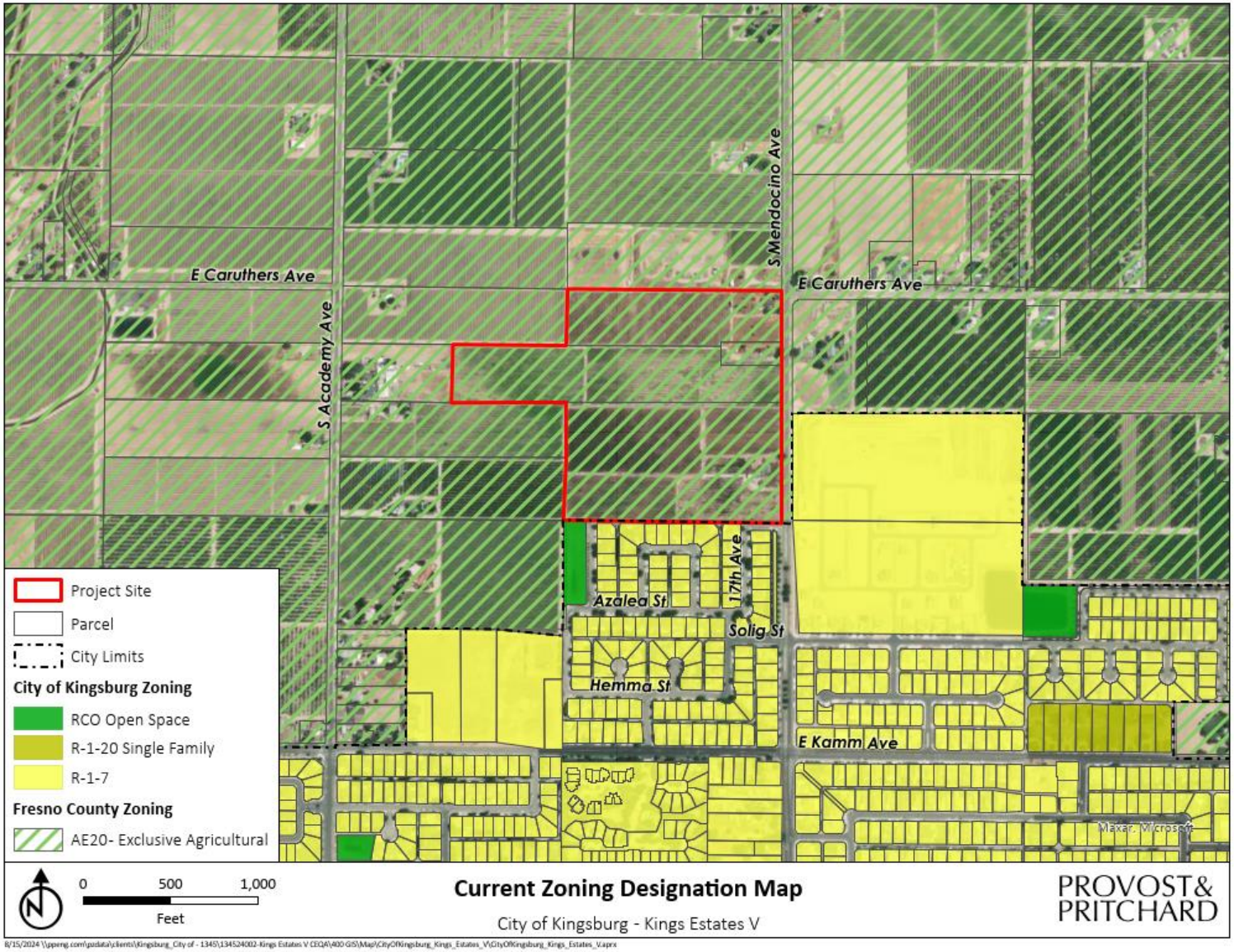
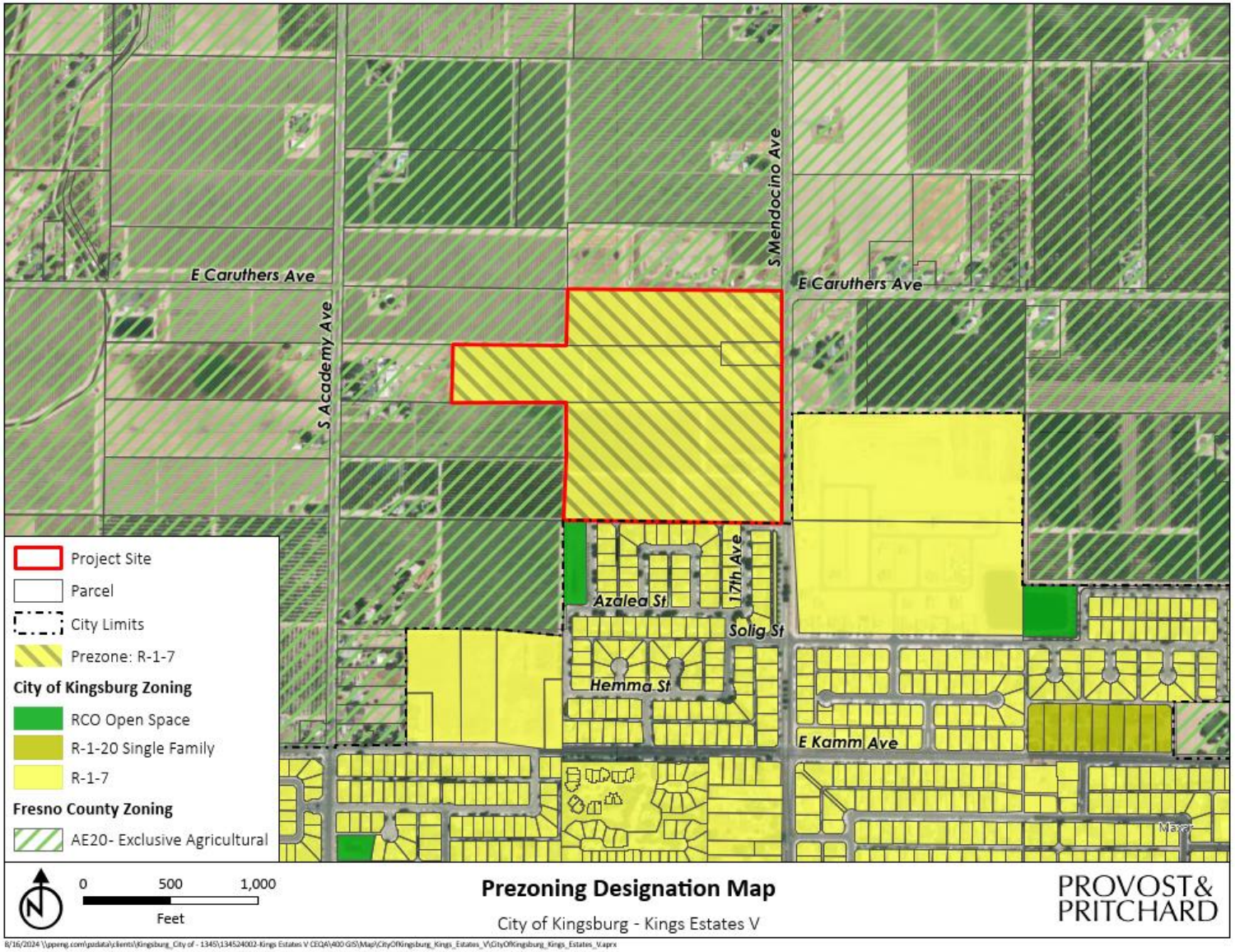


Figure 2-6: Prezoning Map



CHAPTER 3 DETERMINATION

3.1 POTENTIAL ENVIRONMENTAL IMPACTS

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are. checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

The analyses of environmental impacts in Chapter 4 Impact Analysis result in an impact statement, which shall have the following meanings.

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 DETERMINATION

On the basis of this initial evaluation (to be completed by the Lead Agency):

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

October 24, 2024
Date

Holly R Owen
Printed Name/Position

CHAPTER 4 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AESTHETICS

Table 4-1: Aesthetics Impacts

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

4.1.1 BASELINE CONDITIONS

The Project site is located adjacent to the City of Kingsburg within Fresno County. The site is surrounded by residential development to the south and southeast, as well as agricultural and vacant land to the west, east, and north. The Kingsburg General Plan does not list any specific scenic vistas, nor does the Fresno County General Plan Background Report identify one within the vicinity of the Project site.[3] Agriculture and views of the Sierra Nevada Mountains are generally regarded as a scenic resource within Fresno County.

4.1.2 IMPACT ANALYSIS

a) Have substantial adverse effect on a scenic vista?

Less than Significant Impact. The Project would not have a substantial adverse effect on a scenic vista. Agriculture and views of the Sierra Nevada Mountains are generally regarded as resources of aesthetic value within the County. The Project would result in the construction of 97 single-family residences on a parcel that is presently vacant, in agricultural use, and includes one residence that would be demolished as part of the Project. As mentioned above, neither the City nor the County have designated any scenic vistas on or in the immediate vicinity of the Project site. Therefore, impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

[3] (County of Fresno 2000)

No Impact. The Project would not be located on or in the vicinity of a State scenic highway. The nearest officially designated State scenic highway is State Route (SR) 180, located approximately 13.8 miles to the northeast of the Project site.[4] As such, SR 180 is not visible from the site, nor would it be impacted in any way from the Project. Therefore, there would be no impact.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The Project would result in the annexation and prezoning of four parcels to the City of Kingsburg. Subsequent to these actions, construction of the proposed residences, park, basin, landscaping, and roadways would be required to meet all applicable City development standards. The architectural renderings, elevations, and color schemes of the 97 single-family residences would be developed in a manner not to degrade the existing visual character. The implementation of the Project would not degrade the setting; it would provide development intended to be consistent with the character of the neighboring residential development. Therefore, impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Development of the site would not create a new source of substantial light or glare within the area. The Project would result in the development of a residential subdivision on land that abuts similar existing developments. Further, the site is planned for residential development by the City's General Plan. Prior to construction a lighting plan would be required to be reviewed and approved by the city Engineer. Therefore, impacts would be less than significant.

[4] (California Department of Transportation, 2018)

4.2 AGRICULTURE AND FORESTRY RESOURCES

Table 4-2: Agriculture and Forest Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

4.2.1 BASELINE CONDITIONS

The Project site is currently located in Fresno County, northwest of the City of Kingsburg. Fresno County and the larger San Joaquin Valley as a whole is one of the largest producers of agricultural products in the world and relies on its agricultural industry to support the regional economy. The Project site has historically been used for agricultural production, and currently contains some vineyards that would be removed as a part of the Project but is primarily vacant.

The California Department of Conservation's (DOC) 2012 Farmland Mapping and Monitoring Program (FMMP) is a non-regulatory program that produces "Important Farmland" maps and statistical data used for analyzing impacts on California's agricultural resources. The Important Farmland maps identify eight land use categories, five of which are agriculture related: prime farmland, farmland of Statewide importance, unique farmland, farmland of local importance, and grazing land – rated according to soil quality and irrigation status. The eight categories are summarized below[5]:

- PRIME FARMLAND (P): Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- FARMLAND OF STATEWIDE IMPORTANCE (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been

[5] (California Department of Conservation, 2022)

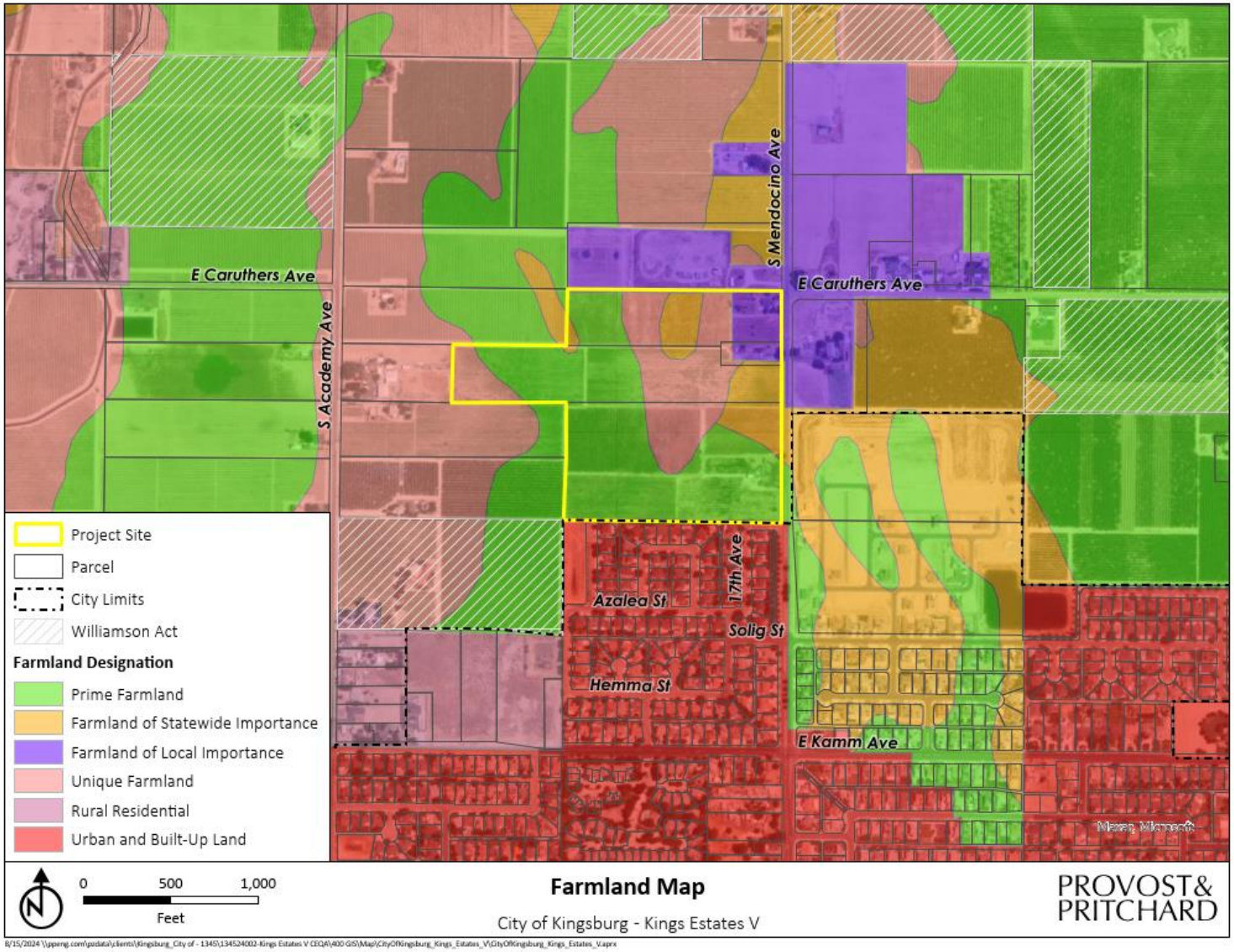
used for irrigated agricultural production at some time during the four years prior to the mapping date.

- UNIQUE FARMLAND (U): Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated but may include non- irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- FARMLAND OF LOCAL IMPORTANCE (L): Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- GRAZING LAND (G): Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for Grazing Land is 40 acres.
- URBAN AND BUILT-UP LAND (D): Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- OTHER LAND (X): Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.
- WATER (W): Perennial water bodies with an extent of at least 40 acres.

The DOC identifies the site as consisting of land that is Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Potential.[6] No Williamson Act contract parcels exist on the site.[7]

[6] (California Department of Conservation, 2022)
[7] (California Department of Conservation, 2024)

Figure 4-1: Farmland Map



4.2.2 IMPACT ANALYSIS

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less than Significant Impact. As mentioned above, the Project site is designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Potential (see Figure 4-1). The Project would result in the conversion of this land to a non-agricultural use which would constitute a significant environmental impact under CEQA. However, while the Project would result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance, the City of Kingsburg General Plan and EIR acknowledges that significant environmental impacts would result from the buildout of the General Plan and the conversion of agricultural lands to urban uses. Within this acknowledgement, the General Plan and EIR states that if approved, the approving body would be required to make a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093.[8] The General Plan and EIR was adopted in July of 1992, at which time a Statement of Overriding Considerations would have been adopted, identifying that buildout of the General Plan would result in significant and unavoidable impacts to agricultural resources due to future development under the General Plan, but that the benefits of the future buildout of the site outweigh the impacts to agricultural resources on-site. Therefore, impacts would be less than significant.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less than Significant Impact. The Project site is zoned AE20 - Exclusive Agriculture by the County of Fresno. The Project site is not under a Williamson Act contract.[9] While the Project would result in the conversion of land zoned for agriculture to R-1-7, the prezoning of the site to R-1-7 promotes consistency with the site's General Plan designation of Low Density Residential. As a result, the City's previously conducted analysis has already contemplated the conversion of the site from an agricultural use within the County to a residential use within the City. Therefore, impacts would be less than significant.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The site is currently zoned AE20 - Exclusive Agriculture by the County and would be prezoned R-1-7 as a part of the Project. Additionally, no forest or timberland exists on the site. Therefore, there would be no impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project would not result in the loss of forest land or conversion of forest land to non-forest use as forest land does not exist within the Project site. The site consists of vacant and agricultural property, which is adjacent to urban uses to the south, and one single-family residence. The site is planned for residential use by the Kingsburg General Plan. Therefore, there would be no impact.

[8] (City of Kingsburg, 1992)
[9] (California Department of Conservation, 2024)

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant Impact. The Project would not involve other changes in the existing environment, which due to their location or nature, would result in the conversion of farmland to a non-agricultural use or conversion of forest land to non-forest use. As discussed above, the Project would result in the loss of Prime Farmland and the conversion of the site from a County agricultural zoning designation to a City residential zoning designation. Due to its consistency with the adopted General Plan and EIR, these would not be considered significant for this Project. Therefore, impacts would be less than significant.

4.3 AIR QUALITY

Table 4-3: Air Quality Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 BASELINE CONDITIONS

The Project site is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the San Joaquin Valley Air Basin (SJVAB). The SJVAB is positioned within the San Joaquin Valley of California. The San Joaquin Valley is bounded by the Sierra Nevada Mountain Range to the east and the Coastal Mountain Range to the west. Wind within the SJVAB typically channels south-southwest during the summer months, while wind flows to the north-northwest during the winter months. Wind velocity for the region is considered low for an area of such size.[10] Due to a lack of strong wind and the natural confinement of the mountain ranges surrounding the SJVAB, the region experiences some of the worst air quality in the world.

Regulatory Attainment Designations

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The United States Environmental Protection Agency (USEPA) designates areas for ozone, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The USEPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, USEPA assigned new

[10] (San Joaquin Valley Air Pollution Control District 2012)

nonattainment designations to areas that had previously been classified as Group I, II, or III for PM_{10} based on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified."

According to the USEPA, Fresno County was in non-attainment for two pollutant concentrations, with PM-2.5 (2012) being classified as in serious non-attainment, and 8-hour Ozone (2015) classified as being in extreme non-attainment as of September 6th, 2024.[11]

[11] (United States Environmental Protection Agency, 2024)

Table 4-4: Summary of Ambient Air Quality Standards and Attainment Designation

Pollutant	Averaging Time	State Standard	Federal Standard	State Attainment Status	Federal Attainment Status
O_3	1 hour	0.09 ppm	N/A	Nonattainment/ Severe	N/A
O_3	8 hours	0.070 ppm	0.070 ppm (4^{th} highest in 3 years)	Nonattainment	Nonattainment/ Extreme
CO	1 hour	20 ppm	35 ppm	Attainment/ Unclassified	Attainment/ Unclassified
CO	8 hours	9.0 ppm	9 ppm	Attainment/ Unclassified	Attainment/ Unclassified
PM_{10}	24 hours	50 µg/m^3	150 µg/m^3 (expected number of days above standard < or equal to 1)	Nonattainment	Attainment
PM_{10}	Annual	20 µg/m^3	N/A	Nonattainment	N/A
$PM_{2.5}$	24 hours	N/A	35 µg/m^3	N/A	Nonattainment
$PM_{2.5}$	Annual	12 µg/m^3	12.0 µg/m^3	Nonattainment	Nonattainment
NO_2	1 hour	0.18 ppm	0.100 ppm	Attainment	Attainment/ Unclassified
NO_2	Annual	0.030 ppm	0.053 ppm	Attainment	Attainment/ Unclassified
SO_2	1 hour	0.25 ppm	0.075 ppm (99^{th} percentile over 3 years)	Attainment	Attainment/ Unclassified
SO_2	3 hours	N/A	0.5 ppm	N/A	Attainment/ Unclassified
SO_2	24 hours	0.04 ppm	0.14 ppm	Attainment	Attainment/ Unclassified
SO_2	Annual	N/A	0.030 ppm	N/A	Attainment/ Unclassified
Pb	Monthly	1.5 µg/m^3	N/A	Attainment	N/A
Pb	Rolling 3-month average	N/A	0.15 µg/m^3	N/A	Attainment/ Unclassified
Sulfates	24 hours	25 µg/m^3	N/A	Attainment	N/A
H_2S	1 hour	0.03 ppm	N/A	Unclassified	N/A
Visibility Reducing Particles (VRP)	8 hours	Visibility of 10 miles or more at relative humidity less than 70 %	N/A	Unclassified	N/A
Vinyl Chloride	24 hours	0.01 ppm	N/A	Attainment	N/A

** For more information on standards visit: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf*
*** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard [9/6/2024].*
****Secondary Standard*
Source: http://www.valleyair.org/aqinfo/attainment.htm. Accessed 9/6/2024.

Construction Generated Emissions

Construction of the Project is assumed to be completed over approximately thirty-one months. Emissions associated with the Project were calculated using the CalEEMod Air Quality Model, Version 2022.1.1.26 (California Emissions Estimator Modeling). The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on anticipated construction schedules and the default parameters contained in the model. Localized air quality impacts associated with the Project would be minor and were qualitatively assessed. Modeling assumptions and output files are included in Appendix A.

Thresholds of Significance

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the Project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the Project. Localized emissions from Project construction and operation are also assessed using concentration-based thresholds that determine if the Project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during Project construction and operation are ROG (reactive organic gases), NOX, PM10, and PM2.5. The SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts, adopted in 2015, contains thresholds for ROG and Nitrogen Oxides (NOX); Sulfur Oxides (SOX), CO, PM10, and PM2.5.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NOX emissions in the presence of sunlight. Therefore, ROG and NOx are termed ozone precursors. The SJVAB often exceeds the state and national ozone standards. Therefore, if the Project emits a substantial quantity of ozone precursors, the Project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM10, and PM2.5; therefore, substantial Project emissions may contribute to an exceedance for these pollutants.

The SJVAPCD adopted significance thresholds for construction-related and operational ROG, NO_X, PM, CO, and SO_X, these thresholds are included in Table 4-5.

Table 4-5: Project-Level Air Quality CEQA Thresholds of Significance

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emissions (tons/year)
CO	100	100
NO_x	10	10
ROG	10	10
SO_x	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Source: SJVAPCD. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 6, 2024.

4.3.2 IMPACT ANALYSIS

Short-Term Construction Generated Emissions

Estimated construction-generated emissions are summarized in Table 4-6.

Table 4-6: Unmitigated Short-Term Construction Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Annual Project Construction Emissions	0.71	1.94	1.90	<0.005	0.50	0.26
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Threshold Exceeded?	No	No	No	No	No	No

Long-Term Operational Generated Emissions

Estimated operational-generated emissions are summarized in Table 4-7.

Table 4-7: Unmitigated Long-Term Operational Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Total Annual Project Operational Emissions	1.37	0.51	4.01	0.01	0.80	0.21
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Threshold Exceeded?	No	No	No	No	No	No

Maximum Daily Emissions of Criteria Air Pollutants

Daily construction and operational emissions generated by the Project are summarized in Table 4-8.

Table 4-8: Maximum Daily Emissions of Criteria Air Pollutants

Source	Daily Emissions Maximum (in pounds)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction – Summer	3.73	36	33.6	0.06	21.4	11.6
Construction – Winter	34	11.6	14.4	0.02	0.72	0.51
Operational – Summer	8.15	2.71	28.1	0.05	4.54	1.18
Operational – Winter	7.29	3.03	19.8	0.05	4.53	1.18
SJVAPCD Threshold	*100*	*100*	*100*	*100*	*100*	*100*
Threshold Exceeded?	No	No	No	No	No	No

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The Project would not conflict with or obstruct implementation of any applicable air quality plan. The proposed Project would not exceed any threshold for air quality emissions that has been set by the SJVAPCD. Therefore, there would be no impact.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment. As shown in Table 4-6,

Table 4-7, and Table 4-8, the Project would not exceed an emissions threshold which has been set by the SJVAPCD for construction or operational related emissions. Therefore, impacts would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. As discussed above, the proposed Project would not result in significant long-term operational emissions. Constructed related emissions, shown in Table 4-6 and Table 4-8, would be temporary in nature and would cease upon Project construction. Short-term construction activities, however, could result in temporary increases in pollutant concentrations that could impact nearby sensitive receptors. Sensitive Receptors are groups that would be more affected by air, noise, and light pollution, pesticides, and other toxic chemicals than others. This includes infants, children under 16, elderly over 65, athletes, and people with cardiovascular and respiratory diseases. High concentrations of these groups would include daycares, residential areas, hospitals, elder care facilities, schools and parks. While the Project would be located in an area near sensitive receptors, such as the residential surrounding the site, the Project would not exceed the daily emission thresholds set by the SJVAPCD. Additionally, the HARP2 air dispersion model was run for the Project site to show the health risk the Project would have on sensitive receptors in the area. The model run, which can be viewed in Appendix A, indicates that the Project would result in a cancer risk of 0.044284 in one million, which is less than the SJVAPCD's threshold of 20 in one million. The Project would also present a chronic risk of 0.0000246856 in one million and an acute risk of 0 in one million, which would be less than the SJVAPCD's threshold of one in one million for both chronic and acute. Therefore, impacts would be less than significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. During construction activities, construction equipment exhaust and application of asphalt, structural coating and other construction applications would temporarily emit odors. Construction would be completed on land currently abutting the City of Kingsburg's northern city limits and could have an effect on some residences that would be located near the construction area of the Project. Construction of the Project would be temporary, and odors would not remain after Project completion. Therefore, impacts would be less than significant.

4.4 BIOLOGICAL RESOURCES

Table 4-9: Biological Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4.4.1 BASELINE CONDITIONS

The Project site is comprised of four parcels located in Fresno County, adjacent to the City of Kingsburg. Three of the four parcels being annexed into the City as a part of the Project would be developed as a part of the Project. The three parcels proposed for development have primarily been used for agriculture in the past, with two rural residential homes having been located on them as well. Currently these three parcels are vacant, except for naturally occurring vegetation and one rural residential home that would be demolished as a part of the Project. The site is regularly tilled in order to ensure that naturally occurring weeds do not become a blight. No surface water or canal is located on or within the immediate vicinity of the site. The site is also not located on or near a wetland, according to the United States Fish and Wildlife

Service.[12] According to the City's General Plan and EIR the City's planning area has not been identified to contain any special status species.[13] Database searches were completed to determine the likelihood of special status species on the Project site. Table 4-10 below summarize the results of the database searches. A biological resources memo describing these database searches in more detail is contained in Appendix B.

Table 4-10: List of Special Status Species with Potential to Occur on the site and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
California tiger salamander – central California DPS (*Ambystoma californiense*)	FT, CT	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	**Unlikely.** The site appeared to lack suitable habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 3 miles south of the site at an unknown date but is listed as extirpated.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats.	**Unlikely.** The site appeared to lack suitable vegetation and habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 3 miles northwest of the site in 1912.
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	FE, CE	An inhabitant of alkali sinks and open grassland habitats in Merced, Kings, Fresno, and Madera counties. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses. The most recent recorded observation of this species in California was in 1992 in Fresno County.	**Unlikely.** The site appeared to lack suitable habitats for this species. There are no recorded observations of this species on the California Natural Diversity Database within the regional vicinity of the project.
Monarch butterfly (*Danaus plexippus*)	FC	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Absent.** The site appeared to lack suitable habitats for this species.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Unlikely.** The site appeared to lack suitable aquatic and upland habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 15.5 miles northeast of the site at an unknown date.

[12] (United States Fish and Wildlife Service, 2024)
[13] (City of Kingsburg, 1992)

Species	Status*	Habitat	Occurrence within the Site
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Possible.** The site appeared to contain a residential house and barn where this species could roost. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles east of the site in 2001.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Opportunistically forages in a variety of habitats. Dens in burrows within alkali sink, valley grassland, and woodland habitats in valleys and adjacent foothills and in human-made structures in cities, rangeland, and agricultural areas.	**Unlikely.** The site appeared to lack suitable habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 9.5 miles southwest of the site in 1975.
Swainson's hawk (*Buteo swainsoni*)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	**Possible.** While the site appeared to lack suitable trees for this species to nest, trees in the surrounding areas appear to provide nesting habitat and the nearest recorded observation of this species within the vicinity was approximately 0.3 miles south of the site in 1926.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal and seasonal pools, with clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Unlikely.** The site appeared to lack suitable habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 10 miles southeast of the site in 1993.
Western spadefoot (*Spea hammondii*)	FPT, CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	**Unlikely.** The site appeared to lack suitable aquatic and upland habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 9.5 miles southeast of the site in 2011.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in	**Unlikely.** The site appeared to lack suitable nesting habitats for this species. The nearest recorded observation of this species within

Species	Status*	Habitat	Occurrence within the Site
		the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds.	the vicinity was approximately 3 miles northwest of the site in 1898.

4.4.2 IMPACT ANALYSIS

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated. The Project site has the potential for several special status species to occur, including migratory birds, Swainson's Hawk, and Pallid bats. The Project could result in adverse impacts to these species or their habitat. In order to minimize the potential of the Project to significantly impact these species, mitigation measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, and BIO-7 be implemented. These mitigation measures include surveys, avoidance, use of buffers, and exclusion. Through implementation of these mitigation measures, impacts would be lowered to a less than significant level. Therefore, impacts would be less than significant with mitigation incorporated.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The Project site has not been identified as containing riparian habitat or other sensitive natural habitat by the United States Fish and Wildlife Service or within local or regional plans policies and regulations.[14] [15] The site is a vacant and primarily undeveloped parcel which has previously been utilized for agriculture. The site contains a dirt field with naturally occurring weeds as the only vegetation present. The site is routinely tilled in order to control the growth of naturally occurring weeds. Therefore, there would be no impact.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. According to the United States Fish and Wildlife Service, the Project site would not be located on or in the immediate vicinity of a federally protected wetland.[16] As a result, the Project does not have the potential to impact any federally protected wetlands. Therefore, there would be no impact.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

[14] (United States Fish and Wildlife Service, 2024)
[15] (City of Kingsburg, 1992)
[16] (United States Fish and Wildlife Service, 2024)

Less than Significant Impact. The Project site is located adjacent to the City of Kingsburg city limits, abutting an existing residential subdivision. As a part of the Project the site would be annexed into the City. While the site is vacant and largely undeveloped, it has experienced prior disturbances that would have discouraged the movement of wildlife through the Project site. Such disturbances include the use of the farm equipment and machinery on the site, proximity to urban uses located immediately south of the Project site, and the location of the Project site in proximity to South Mendocino Avenue, which is designated as an arterial street from the Fresno/Tulare County line to the northern city limits. This roadway produces traffic that generates relatively high levels of noise, making it unlikely that a natural wildlife movement corridor would exist in proximity to South Mendocino Avenue. Therefore, impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The City also does not have a tree preservation ordinance. The Project would be required to comply with all local policies and regulations protecting biological resources. Therefore, there would be no impact.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan. The Project site is located adjacent to the City of Kingsburg and would be annexed to the City as a part of the Project. The site is not currently located within a habitat conservation plan or other type of conservation area. Therefore, there would be no impact.

4.4.3 MITIGATION

BIO-1 (*Swainson's Hawk and Nesting Bird Avoidance*) The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

BIO-2 (*Swainson's Hawk and Nesting Bird Pre-construction Surveys)* If activities must occur within the nesting bird season (February 1 to September 15), a qualified biologist (someone familiar with these species and nesting birds) will conduct a single pre-construction take-avoidance survey for Swainson's hawk nests on the site and within a 0.5-mile radius outside of the site within seven (7) calendar days prior to the start of construction. The Swainson's hawk survey must not be completed between April 21 to June 10 due to the difficulty of identifying nests during this time of year. The survey shall also include inspecting for nesting migratory birds within the site and up to 100 feet outside of the site and for nesting raptors within the site and up to 500 feet outside of the site. All raptor nests shall be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required.

BIO-3 (*Swainson's Hawk and Nesting Bird Avoidance Buffers)* On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable California Department of Fish and Wildlife and/or United States Fish and Wildlife Service guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. If necessary,

avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

BIO-4 (*Maternity Bat Roost Pre-Construction Survey)* If construction activities fall between March 1 and September 30 (bat maternity season) a pre-construction survey will be performed within seven (7) days prior to construction to identify active maternity bat roost locations in the existing house and barn onsite or trees within up to 100 feet of the site prior to the start of construction. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations.

BIO-5 (*Bat Roost Pre-Demolition Survey*) A pre-demolition survey will be performed within five (5) days prior to demolition of the existing house and barn onsite to identify any active bat roosts that could be used by pallid bats. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations. Should any roosting bats be observed, they shall be identified by species using ultrasonic recording equipment and software.

BIO-6 (*Bat Avoidance Buffers)* On discovery of any active maternity season bat roosts or pallid bat roosts, a qualified biologist will determine appropriate avoidance buffers based on the biology of the species, conditions of the roost(s), and the level of project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or within 100 feet of the roost.

BIO-7 (*Bat Exclusion)* On discovery of any active bat roosts within the existing house or barn outside of the bat maternity season (October 1 to February 28), a qualified biologist will prepare an exclusion plan that would detail the methods to be used. It will include the tools to exclude the bat from the structure/roost (i.e., one-way doors or other devices) and the house and barn would be removed within two days. Following completion of exclusion, a report will be prepared that documents the methods and results of these efforts.

4.5 CULTURAL RESOURCES

Table 4-11: Cultural Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

4.5.1 BASELINE CONDITIONS

The Project site is located adjacent to the City within Fresno County. Lands surrounding the Project consist of relatively flat, irrigated farmland and retired farmland, vacant land, and low density residential neighborhoods. Mass agricultural development has heavily disturbed and altered the landscape of the Southern San Joaquin Valley, including the Project site.

4.5.1.1 RECORDS SEARCH

On August 9, 2024, Provost & Pritchard requested a cultural resource records search from the Southern San Joaquin Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University in Bakersfield, California. The purpose of this request was to identify and review prior cultural resource investigations completed in or near the Project site and identify any prehistoric or historical resources that had been previously recorded within the Project site and a 0.5-mile radius of the surrounding area. SSJVIC staff researched historical United States Geological Survey topographic maps, reports of previous cultural resource investigations, archaeological site and survey base maps, cultural resource records, as well as listings of the Historic Properties Directory of the Office of Historic Preservation, General Land Office Maps, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources.

According to the Information Center results, no cultural resources were previously recorded within the Project site, and one cultural resource (P-10-005812) was recorded within a 0.5-mile radius of the Project site (a historic era canal). The SSJVIC did not identify any cultural resource studies within the Project site. Results of the records search are also provided and discussed further in Appendix C.

4.5.2 IMPACT ANALYSIS

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

a-b) Less than Significant Impact with Mitigation Incorporated. As previously mentioned, a cultural resources database search was conducted in August of 2024. This search identified that no cultural resources were previously recorded within the Project site but that there was one identified within a half

mile. In the unlikely event that unidentified historical or archaeological resources are encountered during Project construction, Mitigation Measure CUL-1 would be implemented to reduce any impacts to less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact with Mitigation Incorporated. There is no evidence or record that indicates the Project site has the potential to be an unknown burial site or the site of buried human remains. In the unlikely event human remains are discovered in the Project area, mitigation shall be implemented. Mitigation measure CUL-2 outlined below would be implemented and any impacts resulting from the discovery of remains would be reduced to less than significant.

4.5.3 MITIGATION

CUL-1 (*Archaeological Remains*) In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the Project site, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance. In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project site, all work shall be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.

CUL-2 (*Human Remains*) If human remains are uncovered during construction, the Fresno County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and Public Resources Code 5097.98 require that the coroner notify the NAHC (Native American Heritage Commission) within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

4.6 ENERGY

Table 4-12: Energy Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

4.6.1 BASELINE CONDITIONS

The Project site is located within Fresno County, adjacent to the City of Kingsburg. The Project area is served by Pacific Gas and Electric Company (PG&E) for its natural gas and electricity needs.

4.6.2 IMPACT ANALYSIS

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. For heavy-duty construction equipment, horsepower and load factor were assumed using default data from the CalEEMod model. Fuel use associated with construction vehicle trips generated by the Project was also estimated; trips include construction worker trips, haul trucks trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the Project was based on (1) the projected number of trips the Project would generate (CalEEMod default values), (2) default average trip distance by land use in CalEEMod, and (3) fuel efficiencies estimated in the ARB 2017 Emissions Factors model (EMFAC2017) mobile source emission model.

Construction is estimated to consume a total of 88,847.88 gallons of diesel fuel and 5,744.58 gallons of gasoline fuel (See Appendix A). California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(2), Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel because of unproductive idling of construction equipment. In addition, the energy consumption for construction activities would not be ongoing as they would be limited to the duration of Project construction.

The development's anticipated annual energy consumption is approximately 893,145 kilowatt-hours and 0 therms of natural gas (see Appendix A). Energy consumption of residential uses is currently governed by the 2022 California Building Code, Part 6 for structures, and Title 20 of the California Code of Regulations for appliances. Energy consumption is anticipated to decrease over time as more energy efficient standards take effect and energy-consuming equipment reaches its end-of-life and necessitates replacement. Therefore, impacts would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. State and local authorities regulate energy use and consumption. These regulations at the State level are intended to reduce energy use and GHG (greenhouse gas) emissions. These include, among others, AB 1493 – Light-Duty Vehicle Standards; California Code of Regulations Title 24, Part 6 – Energy Efficiency Standards; and California Code of Regulations Title 24, Parts 6 and 11 – California Energy Code and Green Building Standards. The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, there would be no impact.

4.7 GEOLOGY AND SOILS

Table 4-13: Geology and Soils Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

4.7.1 BASELINE CONDITIONS

4.7.1.1 GEOLOGY AND SOILS

The Project is located in central Fresno County, in the southern section of California's Great Valley Geomorphic Province, or Central Valley, directly adjacent to the south of a portion of the San Joaquin River. The Sacramento Valley makes up the northern third and the San Joaquin Valley makes up the southern two-thirds of the geomorphic province. Both valleys are watered by large rivers flowing west from the Sierra Nevada Range, with smaller tributaries flowing east from the Coast Ranges. Most of the surface of the Central Valley is covered by Quaternary (present day to 1.6 million years ago) alluvium. The sedimentary

formations are steeply upturned along the western margin due to the uplifted Sierra Nevada Range.[17] From the time the Central Valley first began to form, sediments derived from erosion of igneous and metamorphic rocks and consolidated marine sediments in the surrounding mountains have been transported into the Central Valley by streams.

According to the Natural Resource Conservation Service's Web Soil Survey, the Project site is comprised of primarily Delhi sand, 0 to 3 percent slopes (approximately 48%), and Hanford fine sandy loam (approximately 41%), as well as a smaller portion comprised of Tujunga loamy sand, 0 to 3 percent slopes (approximately 11%).[18] These soils are deemed to be either well drained or somewhat excessively drained.

4.7.1.2 FAULTS AND SEISMICITY

The Project area is not located on any known fault or fault zone, but it could experience seismic activity as a result of fault activity in other parts of the state. The nearest active fault is the Kern Canyon Fault, approximately 55 miles to the east of the Project site. The San Andreas Fault is located approximately 85 miles to the west of the Project site.[19]

4.7.1.3 LIQUEFACTION

Liquefaction is a seismic phenomenon in which loose, saturated granular and non-plastic, fine-grained soils lose their structure or strength when subjected to high-intensity ground shaking. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction more commonly occurs in loose, saturated materials. The Project site is not known to be an area that experiences liquefaction.[20]

4.7.1.4 SOIL SUBSIDENCE

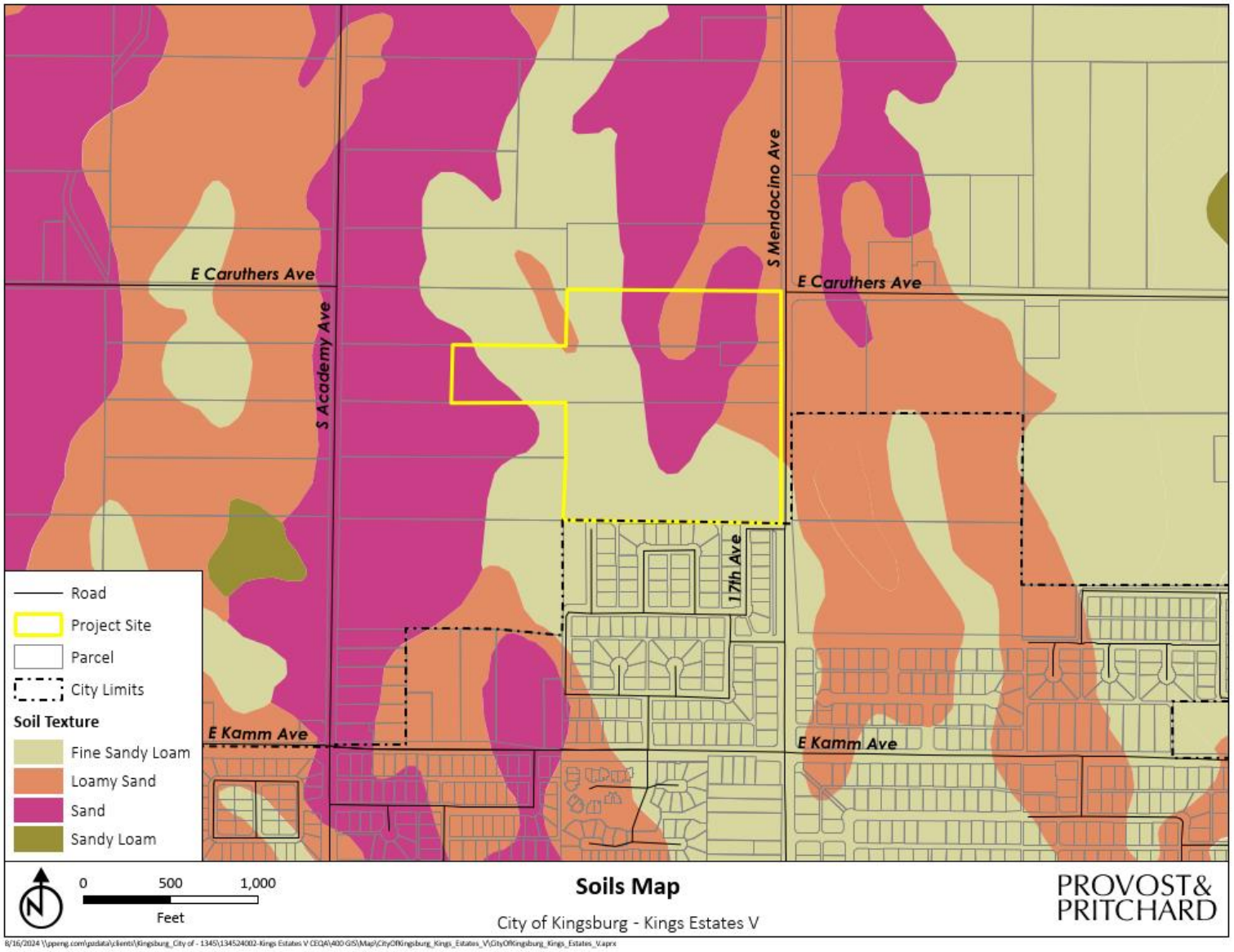
Subsidence occurs below the surface when subsurface pressure is reduced by the withdrawal of fluids (e.g., groundwater, natural gas, oil) resulting in sinking of the ground. While the Central Valley of California is known as an area that has experienced soil subsidence due to groundwater overdraft, the Project is not located in the immediate vicinity of an area that has been subject to subsidence.[21]

4.7.1.5 DAM AND LEVEE FAILURE

According to the California Department of Water Resources Dam Breach Inundation Map, the Project is not in an area that would be susceptible to flooding as a result of dam or levee failure.[22]

[17] Harden, D.R. 1998, California Geology, Prentice Hall, 479 pages
[18] (United States Department of Agriculture, 2024)
[19] (California Department of Conservation 2015)
[20] (County of Fresno, 2000)
[21] (United States Geological Survey, 2024)
[22] (California Department of Water Resources, 2024)

Figure 4-2: Soil Map



4.7.2 IMPACT ANALYSIS

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Strong seismic ground shaking?

Less than Significant Impact. Ground shaking intensity is a function of distance from an earthquake's epicenter and underlying geology. The most common impact associated with ground shaking is damage to structures. The Project would result in the construction of 97 single-family residences that would meet California Building Code requirements governing potential structural damage due to earthquakes. Moreover, the Project area is not located near any known fault or fault zone – the nearest active fault is the Kern Canyon Fault, approximately 55 miles to the east of the Project site. As such, the Project would not cause potential substantial adverse effects, including the risk of loss, injury, or death as a result in a rupture of a known earthquake fault, nor would it result in strong seismic activity from Project inundations. Therefore, impacts would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

No Impact. The Project would not be located in an area that is known to experience liquefaction. The Project would result in the construction of 97 new single-family residences, associated development roadways, an approximately 0.99-acre park, and an approximately 1.34-acre basin. The new construction would not increase the likelihood for liquefaction to occur within the Project area. Therefore, there would be no impact.

iv. Landslides?

No Impact. The Project is located in a relatively flat area with little to no potential for landslides to occur. Construction of the Project would not increase the likelihood for landslides to occur at the Project site. Therefore, there would be no impact.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Earthmoving activities associated with the Project would include excavation, trenching, grading, and construction. These activities could expose soils to erosion processes; however, the extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. In addition, dischargers whose projects disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation, and construction of linear underground or overhead facilities associated with residential construction but does not include regular maintenance activities performed to restore the original lines, grade, or capacity of the overhead or underground facilities. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Since the

Project site has relatively flat terrain with a low potential for soil erosion, and the Project would develop a SWPPP and comply with the State Water Resources Control Board (SWRCB) requirements, the Project's impacts would be less than significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. Due to the relatively flat topography of the Project and greater surrounding area and distance from active faults, landslides, lateral spreading, subsidence, liquefaction, or collapse are not considered a potentially significant geologic hazard. The Project would not be located on a geologic unit or soil that is unstable or would become unstable during seismic activity, nor would the Project be located on land known for subsidence.[23] Therefore, there would be no impact.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact. The Project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building code, creating substantial direct or indirect risks to property or life. The Project site is comprised of loamy sands, sandy loams, and sand that is not expansive in nature.[24] Therefore, there would be no impact.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project would not result in the use of septic tanks or any alternative wastewater disposal systems. Therefore, there would be no impact.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than Significant Impact with Mitigation Incorporated. There are no known unique paleontological resources or geological features on the Project site; however, during construction unique paleontological or geological resources could be unearthed. In this event, all construction would be required to stop, the City would be notified, and a qualified geologist and/or paleontologist would be consulted. Employment of mitigation measure GEO-1 would lower any potential significant impacts to a less than significant level. Therefore, impacts would be less than significant with mitigation incorporated.

4.7.3 MITIGATION

GEO-1 Should a unique paleontological resource, site, or unique geological feature be unearthed during any stage of Project activities, work in the area of discovery will cease until the area is evaluated by a qualified geologist and/or paleontologist. If discoveries are uncovered, the Project proponent will abide by recommendations of the geologist or paleontologist.

[23] (United States Geological Survey, 2024)
[24] (United States Department of Agriculture, 2024)

4.8 GREENHOUSE GAS EMISSIONS

Table 4-14: Greenhouse Gas Emissions Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

4.8.1 BASELINE CONDITIONS

Commonly identified GHG emissions and sources include the following:

Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas. CO_2 is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH_4) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.

Ozone (O_3) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. O_3 is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth, and what the effects of clouds will be in determining the rate at which the mean temperature will increase. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO_2 to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO_2, CH_4, and N_2O have increased by at least 40 percent, 150 percent, and 20 percent respectively since the year 1750. GHG emissions are typically expressed in carbon dioxide-equivalents (CO_2e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 25 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2. In accordance with SJVAPCD's *CEQA Greenhouse Gas Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects*[25], proposed projects complying with Best Performance Standards (BPS) would be determined to have a less-than-significant impact. Projects not complying with BPS would be considered less than significant if operational GHG emissions would be reduced or mitigated by a minimum of 29 percent, in comparison to business-as-usual (year 2004) conditions. In addition, project-generated emissions complying with an approved plan or mitigation program would also be determined to have a less-than-significant impact.

4.8.2 IMPACT ANALYSIS

Project Related Emissions

Short-term construction emissions associated with the Project were calculated using CalEEMod, Version 2022.1.1.26. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on an anticipated construction schedule of approximately thirty-one months. Remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in Appendix A. Estimated construction-generated and operational related emissions are summarized in Table 4-15 and Table 4-16. GHGs impact the environment over time as they increase and contribute to climate change.

[25] (San Joaquin Valley Air Pollution Control District 2009)

Table 4-15: Short Term Construction Related GHG Emissions

	Emissions (MT CO2e) in Tons per Year
Maximum Annual Construction CO2e Emissions	329
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Threshold Exceeded?	No

* As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en Accessed 9/5/2024.

Table 4-16: Long Term Operational Related GHG Emissions

	Emissions (MT CO2e) in Tons per Year
Annual Operational CO2e Emissions	1,074
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Threshold Exceeded?	No

* As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en Accessed 9/5/2024.

Construction related generation of GHGs would be a maximum of 329 Metric Tons of Carbon Dioxide Equivalent (MT CO2e) per year, while operational emissions are expected to be 1,074 MT CO2e per year. The Project would not exceed the AB 32 consistency threshold for land use projects for both short term construction emissions and long-term operational emissions as a result.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. The Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. As shown in Table 4-15 and Table 4-16, the Project is not expected to result in the generation of GHG emissions that would exceed the AB 32 consistency threshold of 1,100 MT CO2e annually during both construction and operational activities. Therefore, impacts would be less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The Project would be in compliance with all SJVAPCD policies and regulations and would not exceed an applicable threshold for GHG emissions. Therefore, there would be no impacts.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Table 4-17: Hazards and Hazardous Materials Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

4.9.1 BASELINE CONDITIONS

4.9.1.1 HAZARDOUS MATERIALS

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese List data. In addition to the EnviroStor database, the SWRCB GeoTracker database provides information on

regulated hazardous waste facilities in California, including underground storage tank (UST) cases and non-UST cleanup programs, including Spills-Leaks-Investigations-Cleanups sites, Department of Defense sites, and Land Disposal program. A search of the DTSC EnviroStor database and the SWRCB GeoTracker performed on August 8, 2024, determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site or immediate surrounding vicinity.[26] [27]

4.9.1.2 AIRPORTS

The Project is not located within the boundaries of an adopted Airport Land Use Compatibility Plan. The nearest airport or air strip to the Project is the Selma Airport located approximately six miles to the northwest.

4.9.1.3 EMERGENCY RESPONSE PLAN

The City of Kingsburg has an Emergency Services Plan that was adopted in 2010 and is currently undergoing an update.[28] The Plan addresses risks to the community such as fire, law enforcement, public health threats, and other risks.

4.9.1.4 SENSITIVE RECEPTORS

Sensitive Receptors are groups that would be more affected by air, noise, and light pollution, pesticides, and other toxic chemicals than others. This includes infants, children under 16, elderly over 65, athletes, and people with cardiovascular and respiratory diseases. High concentrations of these groups would include daycares, residential areas, hospitals, elder care facilities, schools and parks. The nearest sensitive receptors to the area would include the residential development immediately adjacent to the site on the south side of the site.

4.9.2 IMPACT ANALYSIS

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

a-b) Less than Significant Impact. The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The Project would result in the construction of 97 single-family residences, an approximately 0.99-acre park, and an approximately 1.34-acre basin on land that would be annexed into the City of Kingsburg. During construction, equipment would be used that could result in the spill of hazardous materials, such as diesel fuel, lubricants, and solvents. However, the contractor would comply with all California Department of Occupational Safety and Health Administration regulations regarding regular maintenance and inspection of equipment, spill prevention, and spill remediation in order to reduce the potential for incidental release of pollutants or hazardous substances onsite. Furthermore, any potential accidental hazardous materials spills during construction are the responsibility of the contractor to remediate in accordance with industry best management practices and State and local regulations. Therefore, impacts would be less than significant.

[26] (California Department of Toxic Substances Control, 2024)
[27] (State Water Resources Control Board, 2024)
[28] (City of Kingsburg 2010)

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school. No school, public or private, exists within one quarter mile of the Project site, nor is one currently proposed within one quarter mile of the site. Therefore, there would be no impact.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As discussed above, a search of the EnviroStor and GeoTracker databases was conducted, and the Project area has not been identified to contain a known hazardous material spill. Therefore, there would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project would not be located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public or private airport where such a plan has not been adopted. The Project is located approximately six miles southeast of the nearest airport, the Selma Airport, and is not located within an adopted airport land use compatibility plan. Therefore, there would be no impact.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Project, during construction, would result in truck deliveries; however, no detours or road closures are expected to occur as a result of construction activities. In addition, any potential work within existing roadways would be required to be reviewed and approved by the City Engineer. Therefore, there would be no impact.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The Project is located adjacent to the City of Kingsburg and would be annexed to the City as a result of the Project. This area is characterized by urban development to the immediate south, where wildland fires are unlikely to occur. In addition, the Project is not located within the vicinity of a State Responsibility Area (SRA) or a very high fire hazard severity zone (see Section 4.20). Therefore, there would be no impact.

4.10 HYDROLOGY AND WATER QUALITY

Table 4-18: Hydrology and Water Quality Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

4.10.1 BASELINE CONDITIONS

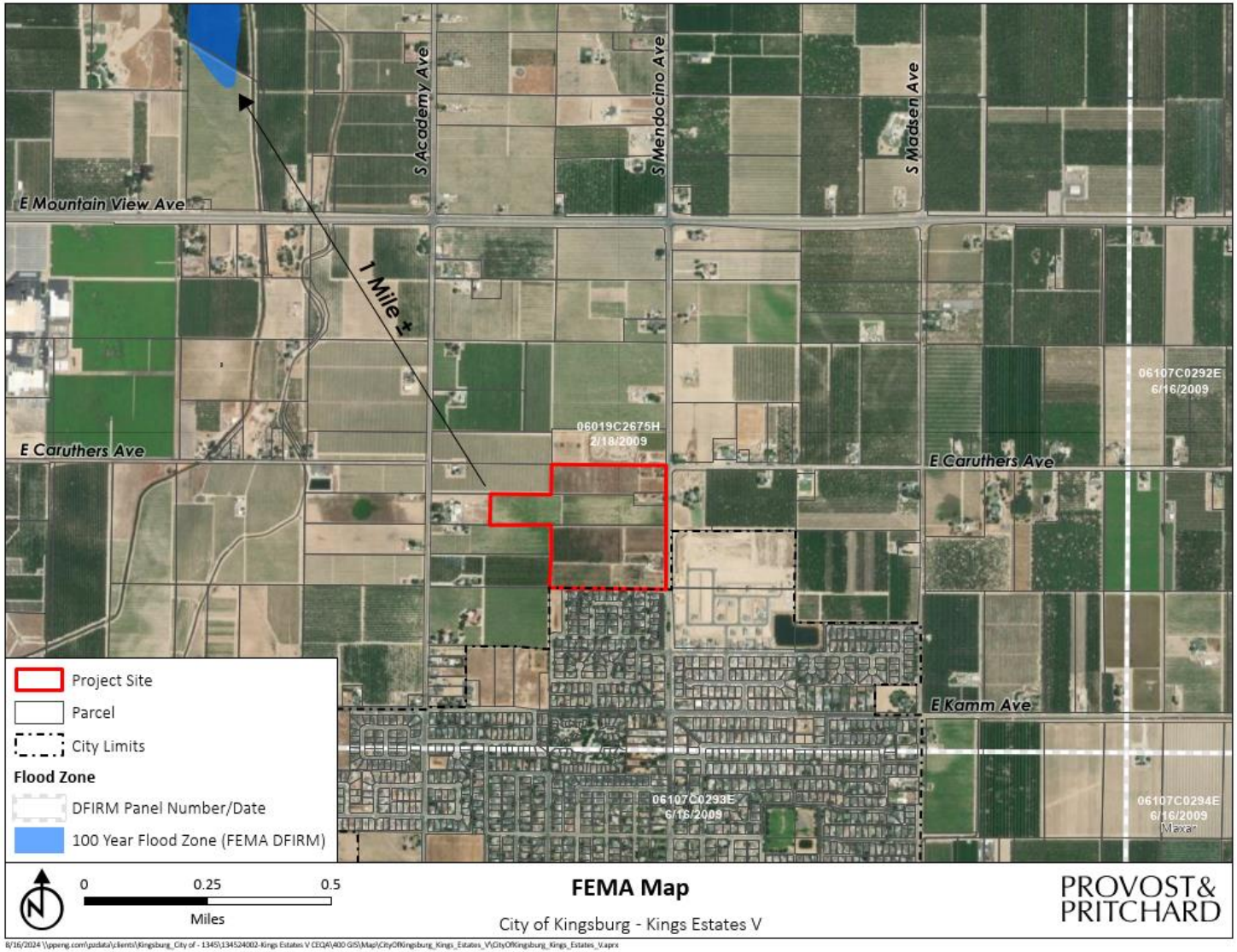
The Project is located within the San Joaquin Valley Basin and the Kings Subbasin. The site is located within the boundaries of the of the Central Kings Groundwater Sustainability Agency (GSA).[29] The City of Kingsburg is, for the most part, located within the boundaries of the South Kings GSA. While the Project site is not located in the vicinity of a surface body of water, the site is located within the boundaries of the Fresno County Sole Source Aquifer.[30] This aquifer provides for the majority of drinking water for the area, making water quality protection increasingly important in the Project area. According to the Federal Emergency

[29] (California Department of Water Resources, 2024)
[30] (United States Environmental Protection Agency 2023)

Management Agency (FEMA), the Project site is located approximately one mile from the nearest flood zone (see Figure 4-3).[31]

[31] (Federal Emergency Management Agency, 2024)

Figure 4-3: FEMA Flood Map



4.10.2 IMPACT ANALYSIS

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. In compliance with State regulations, all development within the Project site would be required to comply with State regulations adopted to reduce groundwater degradation. The SWRCB requires the preparation of a SWPPP for projects that exceed specified size limits. The Project would be required to obtain SWRCB approval of its SWPPP prior to construction. Therefore, the Project would have a less than significant impact through implementation of planned Project design features (such as a stormwater basin) and through compliance with adopted SWPPP regulations. Impacts would be less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The Project would include the development of 97 residential lots on the Project site. As a part of the Project, the site would be annexed into the City. As a result, the City would be the sole water provider for the development. Groundwater is supplied for residential use by the City in residential developments.[32] The City is within the Kings Basin, which is not adjudicated; therefore, there are presently no limitations placed on groundwater pumping volumes. According to the City's 2020 Urban Water Management Plan (UWMP), current and projected residential water demand is based on the Fresno Council of Governments Census population projections.[33] From 2000 to 2020, the actual growth rate for the City was well below the projected growth rate, 1.9% versus 3%, respectively.[34] As such, the City has planned for population growth that would be historically higher than actual growth rates for its future water demand. As discussed in Section 4.14, it is anticipated that the Project would add approximately 282 residents to the City's population. This increase is less than a quarter of the projected population growth for the City and its UWMP over the five years from 2025 to 2030, and the UWMP anticipates water demand to nearly double from 2020 to 2045.[35] Because the Project would result in a use that aligns with the site's General Plan land use designation, the Project would be in line with the analysis provided within the City's UWMP. The additional demand for groundwater as a result of the Project would be within the City's expected capacity. Therefore, impacts would be less than significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. The Project site does not contain any waterways and, as such, implementation of the Project would not alter the course of a stream or river. However, the Project would require grading and soil exposure during construction. If not controlled, the transport of these materials via local stormwater systems into local waterways could temporarily increase sediment concentrations. To minimize this impact, the proposed Project would be required to comply with all of the requirements of the State General Construction Permit and would be required to submit a SWPPP to the SWRCB prior

[32] (City of Kingsburg, 2020)
[33] Ibid.
[34] Ibid.
[35] Ibid.

to start of construction activities. Mandatory compliance with State regulations would ensure that impacts from erosion and siltation would be less than significant.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

ii-iii) Less than Significant Impact. Although the Project would increase the rate of surface runoff, runoff would be directed to an on-site stormwater basin (constructed as part of the Project), adequately sized to handle the increased rate and amount of surface runoff. Impacts would be less than significant.

iv. impede or redirect flood flows?

Less than Significant Impact. The Project site is not located in a flood plain; therefore, it would not impede or redirect flood flows. There would be no impact.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

No Impact. The Project site is not located within a flood zone, and it is not within a flood hazard, tsunami, or seiche zone. Therefore, there would be no impact.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Project would be located within the boundaries of the Central Kings GSA.[36] The City of Kingsburg is primarily located within the South Kings GSA.[37] Subsequent to annexation of the Project site to the City, the California Department of Water Resources and the two aforementioned GSA's could agree upon a boundary realignment which would result in the Project site being moved into the South Kings GSA. Both of the two GSA's have completed their Groundwater Sustainability Plan. The Project would not be in conflict with either plan. Position of the Project site in one GSA or the other could result in a difference in fees due, but would not have a physical impact on the environment. Therefore, there would be no impact.

[36] (Central Kings Groundwater Sustainability Agency, 2024)
[37] (South Kings Groundwater Sustainability Agency, 2018)

4.11 LAND USE AND PLANNING

Table 4-19: Land Use and Planning Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

4.11.1 BASELINE CONDITIONS

The Project site is located within the County, adjacent to the City of Kingsburg. The site is within the City's sphere of influence. Additionally, the site is zoned AE20 - Exclusive Agriculture by the County and is designated as Low Density Residential by the City's General Plan.

4.11.2 IMPACT ANALYSIS

a) Would the project physically divide an established community?

No Impact. The Project would not physically divide an existing community. As mentioned above, the subject parcels would be annexed to the City from the County. As the Project site is located adjacent to the current city limits, annexation of this parcel would be done in a contiguous manner. The City would connect the site to development south of the Project via extensions of 14th Avenue and 17th Avenue, and with access points from South Mendocino Avenue. In order for the Project to be approved, Fresno LAFCo would be required to approve an application for annexation. Therefore, there would be no impact.

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project would result in the construction of 97 single-family residences, an approximately 0.99-acre park, an approximately 1.34-acre basin, and roadways in an area planned for Low Density Residential use. As a part of the Project, the site would be annexed into the City and prezoned as R-1-7. The R-1-7 zone district is consistent with the existing Low Density Residential land use designated for the site by the City's General Plan. The TSM would be developed meeting the density requirements of the Low Density Residential land use. These actions further the objectives of the City's General Plan by providing development in the areas in the City where they are planned for. The Project would be required to meet all applicable City of Kingsburg land use policies and regulations. Therefore, there would be no impact.

4.12 MINERAL RESOURCES

Table 4-20: Mineral Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

4.12.1 BASELINE CONDITIONS

The California Geological Survey (CGS) is responsible for the classification and designation of areas within California containing or potentially containing significant mineral resources. The CGS classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geologic Board, as mandated by the Surface Mining and Reclamation Act of 1975. These MRZs identify whether known or inferred significant mineral resources are presented in areas. Lead agencies are required to incorporate identified MRZs resource areas delineated by the State into their general plans.[38]

According to the CGS Mineral Land Classification map, the Fresno County area, including the Project site, is known to produce aggregate materials.[39] The City of Kingsburg General Plan and the Fresno County General Plan Background Report have not identified the Project site or land in its vicinity as containing mineral resources. The nearest known mineral producing site (sand and gravel) is along the Kings River, approximately 8.2 miles to the northeast.[40]

4.12.2 IMPACT ANALYSIS

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No impact. The Project site is not known to contain any mineral deposits that would be of value to the region and the State. The Project would not result in the loss of availability of a mineral resource which would be of value to the region or the State. Therefore, there would be no impact.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

[38] Public Resources Code, Section 2762(a)(1)
[39] (Unitied States Geological Survey, 2022)
[40] (County of Fresno, 2000)

No impact. The Project site has not been identified as containing a locally important mineral resource by the Kingsburg General Plan, a specific plan, or any other land use plan. The Project would not result in the loss of any locally important mineral resource. Therefore, there would be no impact.

4.13 NOISE

Table 4-21: Noise Impacts

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

4.13.1 BASELINE CONDITIONS

The Project site is located within the County of Fresno and would be annexed into the City as a part of the Project. According to the City's General Plan, the City requires that daytime noise sources within single-family residential areas remain below 55 decibels during the day.[41] The site is located adjacent to lands used for agricultural purposes and accustomed to heavy machinery use.

4.13.2 IMPACT ANALYSIS

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. The Project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. During construction, the Project would temporarily utilize equipment that would exceed 55 decibels. While noise levels may temporarily be exceeded during such activities, construction noise would diminish with distance from the source. Construction noise would also be temporary and cease upon completion. As a result, construction noise is not an anticipated event which would result in a significant impact.

Noise sources associated with operation of the Project would consist of low speed on-site vehicular noise, landscaping maintenance, general conversations, and mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] units). Due to the distances and low noise levels associated with general site

[41] (City of Kingsburg, 1992)

activities, on-site traffic, and landscape maintenance, these sources are not considered substantial and are not analyzed further. Therefore, impacts would be less than significant.

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. The Project would not result in generation of excessive ground borne vibration or ground borne noise levels. Like ordinary noise levels, ground borne noise levels diminish in amplitude with distance from the source. Construction activities can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. Given the type of improvements, it is not anticipated the Project would generate excessive ground borne vibration or ground borne noise levels. The Project would be required to adhere to all applicable City policies and regulations governing ground borne vibration. Therefore, impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project would not be located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public or private airport where such a plan has not been adopted. The Project is located approximately six miles southeast of the nearest airport, the Selma Airport, and is not located within an adopted airport land use compatibility plan. Therefore, there would be no impact.

4.14 POPULATION AND HOUSING

Table 4-22: Population and Housing Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

4.14.1 BASELINE CONDITIONS

The Project site is located on approximately 42.52 acres of land (four parcels), directly north of the City of Kingsburg. Each of the four parcels is designated as Low Density Residential land uses by the City's General Plan. Currently the parcels are under the jurisdiction of the County of Fresno and planned for Agriculture by the County's General Plan.

According to the United States Census Bureau, the County of Fresno had an estimated population of 1,017,162 in 2023, while the City of Kingsburg had an estimated population of 13,013 people in 2022. The United States Census Bureau estimated that in 2022 the City had a rate of 2.91 people per household.[42]

4.14.2 IMPACT ANALYSIS

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The Project would not create a substantial increase in population in the area, either directly or indirectly. The Project would result in the construction of 97 single-family residential lots on land that would be annexed into the City as a part of the Project. At 2.91 residents per household, the Project would add approximately 282 new residents to the City's population. While the Project would result in population growth through the construction of 97 homes, the new development is consistent with the City's General Plan Land Use designation of Low Density Residential. Therefore, impacts would be less than significant.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The Project would result in the construction of 97 homes on land that would be annexed into the City of Kingsburg. Land being developed

[42] (Unitied States Census Bureau, 2022)

as part of the project has historically been used for agricultural purposes, containing one single-family residence that would be demolished. The demolition of one residence as part of the Project is considered to have no significant impact on population and housing, as the Project proponent has acquired the property proposed for development. Therefore, there would be no impact.

4.15 PUBLIC SERVICES

Table 4-23: Public Services

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

4.15.1 BASELINE CONDITIONS

4.15.1.1 FIRE PROTECTION:

The Project would be served by the Kingsburg Fire Department, which responds to all hazards incidents, including fire, rescue, hazmat, advanced life support (ALS) transport, and ALS first response.[43] The Kingsburg Fire Department operates out of two stations, and the nearest station is located approximately 1.5 miles to the south of the Project.

4.15.1.2 POLICE PROTECTION:

The Project would be served by the Kingsburg Police Department, located approximately 1.6 miles to the south of the Project site.

4.15.1.3 SCHOOLS:

Kingsburg Unified School District operates several schools within the City. The nearest public schools to the site are Kingsburg Elementary School, approximately 4,000 feet to the south of the site, and Rafer Johnson Junior High School, approximately 4,100 feet to the south. The nearest private school facility to the Project site is Happy Days School, located approximately 3,700 feet to the south of the site.

4.15.1.4 PARKS

The City of Kingsburg hosts nine parks managed by the City's Parks and Recreation department.[44] The closest park is Nelson Park, situated approximately 3,000 feet southeast of the Project site.

[43] (Kingsburg Fire Department, 2024)
[44] (City of Kingsburg, 2024)

4.15.1.5 LANDFILLS

The City of Kingsburg provides garbage, recycling, and green waste disposal services through Mid Valley Disposal.

4.15.2 IMPACT ANALYSIS

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire Protection:

Less than Significant Impact. The Project site is located approximately 1.5 miles from the nearest City of Kingsburg Fire Department station. While the site would have been under County jurisdiction prior to annexation, the Kingsburg Fire Department would have already responded to calls to the site, as it is the nearest fire entity. The Project would be served by the City's Fire Department subsequent to annexation. Construction of the Project would not substantially increase the service area for the Fire Department, nor would it require the hiring of additional personnel. In addition, payment of impact fees to fire facilities, included in the "Public Safety" fees, is a requirement prior to issuance of building permits. With the payment of impacts fees, impacts would be less than significant.

ii. Police Protection:

Less than Significant Impact. The Kingsburg Police Department, located approximately 1.6 miles from the site, would provide police protection for the Project once it is annexed to the City. Currently, the site is served by the Fresno County Sheriff's Office. Construction of the Project would not substantially increase the service area for the Police Department, nor would it require the hiring of additional personnel. In addition, payment of impact fees to police facilities, included in the "Public Safety" fees, is a requirement prior to issuance of building permits. With the payment of impacts fees, impacts would be less than significant.

iii. Schools:

Less than Significant Impact. The Project would result in the construction of 97 single-family residences. Payment of fees to a school district is considered full mitigation for project impacts on school facilities (Government Code Section 65996(a)). Therefore, the Project applicant would be required to pay the statutory fees to accommodate the impact of Project-generated students, reducing impacts to a less than significant level. Senate Bill 50 deems payment of the fees "to provide full and complete school facilities mitigation." As payment of these fees is required prior to issuance of building permits, impacts would be less than significant.

iv. Parks:

Less than Significant Impact. The Project proposes to construct 97 single-family residences, which would encourage population growth as a direct result. However, the Project also includes the development of an approximately 0.99-acre neighborhood park in the northeastern portion of the Project site. The City of Kingsburg General Plan uses a standard of 2.7 acres per 1,000 people for its neighborhood park and

playground development, which is equivalent to approximately 370 people per acre of parkland.[45] At 2.91 residents per household, the Project would add approximately 282 new residents to the City's population. As such, the Project would add more acreage of parkland per population than designated by the General Plan. In addition, payment of impact fees for parks and recreation would be required for the Project. As such, impacts would be less than significant.

v. Other public facilities:

Less than Significant Impact. The Project site would detach from the Kings River Conservation District and the Consolidated Irrigation District. With annexation to the City of Kingsburg, the Project site would also be annexed into the City of Kingsburg CFD, providing public services to the site. The Project would also result in the generation of solid waste during construction and operational activities. During construction, waste produced would be the responsibility of the contractor to dispose of. Subsequent to the construction of the single-family residences, operations would result in the generation of solid waste, recyclables, and organics. The City contracts with Mid Valley Disposal for trash collection services. Refuse collected from the site would be disposed of at the American Avenue Landfill, approximately 33 miles to the northwest of the site. According to CalRecycle, the American Avenue Landfill is projected to have capacity through the year 2031.[46] Therefore, impacts would be less than significant.

[45] (City of Kingsburg, 1992)
[46] (California Department of Resources Recycling and Recovery, 2024)

4.16 RECREATION

Table 4-24: Recreation Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

4.16.1 BASELINE CONDITIONS

The Project site would be annexed into the City of Kingsburg as a result of the Project. The City of Kingsburg provides parks and open space for the residents of the City. The nearest City owned and operated parks are Nelson Park, located approximately 3,000 feet southeast of the site, Memorial Park, located approximately 1.5 miles south of the Project site, Veterans Park, located approximately 1.3 miles to the southwest, and Erling Park, approximately 1.3 miles to the southeast.

4.16.2 IMPACT ANALYSIS

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. The Project would result in the construction of a 97-lot residential subdivision. As a part of the Project, an approximately 43,499 sqft park (0.99 acres) would be constructed to serve the Project. As discussed above, the Project would result in the increase of the City's population by approximately 282 people, and while these new residents may use existing City parks the increase in usage would be minor. Therefore, the impacts are less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than Significant Impact. As discussed above, the Project would include a neighborhood park of approximately 43,499 sqft in size. Any adverse physical effect on the environment because of this Project is discussed in the appropriate impact topic throughout this document. Therefore, impacts would be less than significant.

4.17 TRANSPORTATION

Table 4-25: Transportation Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

4.17.1 BASELINE CONDITIONS

The Project would result in the annexation of the Project site to the City of Kingsburg. Major transportation routes within the City include SR 99 and SR 201. The Project site is abutted by South Mendocino Avenue, an arterial street, to its east.

In December 2018, modifications to the CEQA Guidelines were adopted by the Governor's Office of Planning and Research (OPR), which requires all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate, enacted by the State Legislature through Senate Bill 743, took effect July 1, 2020. This analysis relies on the *Fresno County SB 743 Implementation Regional Guidelines*, prepared in January 2021. If the guidelines do not apply, the analysis will rely on information prepared by OPR as part of their December 2018 publication entitled *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory), which provides guidance for evaluating transportation impacts based on VMT.[47]

4.17.2 IMPACT ANALYSIS

a) Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. As described in Appendix D, the Project would not conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The Project would be consistent with the 2022 Regional Transportation Plan. While the Project would result in the extension of neighborhood roadways to serve the subdivision, the Project would be required to adhere to all applicable laws, policies, and plans regarding circulation and transit facilities within the City of Kingsburg. Therefore, impacts would be less than significant.

[47] (Governor's Office of Planning and Research, 2018)

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

Less than Significant Impact. As described in Appendix D and in Impact Analysis "a" above, the Project would be consistent with the 2022 Regional Transportation Plan (RTP). The RTP was adopted by a Program EIR which found that VMT impacts from each respective jurisdiction would result in a significant and unavoidable impact, while also adopting mitigation measures for subsequent projects. As this Project proposes to develop consistent with the Kingsburg General Plan, this Project would be considered a subsequent project. Further described in Appendix D, all feasible mitigation measures adopted by the Program EIR were incorporated into the Project either by Project feature or are standard requirements of subdivision projects. This Project would create no new additional impacts that were not analyzed in the 2022 RTP EIR. Therefore, impacts would be less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The Project would not substantially increase hazards due to a geometric design feature or incompatible uses. The Project would result in the construction of 97 single-family residences on the Project site. The Project does not propose the construction of a hazardous geometric design feature, nor does it propose an incompatible use for the site. Therefore, there would be no impact.

d) Would the project result in inadequate emergency access?

No Impact. The Project would not result in inadequate emergency access. No road closures would be necessary in order for the Project to be developed. The Project would be required to be reviewed and approved by the City Engineer prior to approval, ensuring that access would be maintained. In addition, construction of the Project would not create a conflict with designated emergency routes. Therefore, there would be no impact.

4.18 TRIBAL CULTURAL RESOURCES

Table 4-26: Tribal Cultural Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

4.18.1 BASELINE CONDITIONS

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14) requires that a lead agency, within 14 days of determining that it would undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement would be made. The City of Kingsburg has not received letters from any tribe requesting notification.

4.18.1.1 RECORDS SEARCH

A records search from the SSJVIC of the CHRIS, located at California State University, Bakersfield, was conducted in August of 2024. The SSJVIC records search includes a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the

California Points of Historical Interest, the California Historical Landmarks, the California Register of Historical Resources, the National Register of Historic Places, and the California State Built Environment Resources Directory listings were reviewed for the Project site as well as an additional one-half mile radius. Due to the sensitive nature of cultural resources, archaeological site locations are not released. Additional sources included the State Historic Preservation Office Historic Properties Directory, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources. The records search of the Project site indicated that there were no known tribal cultural resources on-site.

4.18.2 IMPACT ASESSMENT

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

vi. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or

vii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact with Mitigation Incorporated. The City, as the lead agency, has not received any tribal letters pursuant to Public Resources Code Section 21080.3.1, et seq. (AB 52) officially requesting notification of any projects. Additionally, a records search of the Project site indicated that there were no known tribal cultural resources on-site. In the unlikely event of a discovery, mitigation will be implemented. With incorporation of mitigation measure CUL-1 and CUL-2 described above in Section 4.5, impacts resulting from the discovery of remains interred on the Project site or the discovery of another tribal cultural resource would be less than significant.

4.18.3 MITIGATION

See CUL-1 and CUL-2 outlined above in Section 4.5.3.

4.19 UTILITIES AND SERVICE SYSTEMS

Table 4-27: Utilities and Service Systems Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

4.19.1 BASELINE CONDITIONS

The Project site would be annexed to the City as a part of the Project. The City is the water and storm drainage provider for residents of the City. The City also contracts with Mid Valley Disposal for solid waste pickup services. The Selma Kingsburg Fowler County Sanitation District (SKFCSD) is the sewer facilities provider for the City. PG&E is the natural gas and electricity provider for the area. The Project site is primarily vacant and undeveloped or in agricultural use, but one residence would be demolished as a part of the Project.

4.19.2 IMPACT ANALYSIS

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. Subsequent to annexation to the City, the Project would connect to City infrastructure for water and storm drainage services. The Project would connect to City water services existing in the residential development to the south. Additionally, the Project would connect to the existing City storm drain basin also abutting the Project site to the southwest. For sewer services, the Project would connect to existing SKFCSD infrastructure located in the residential development to the

south of the Project site. Likewise, the Project would connect to existing PG&E and telecommunications facilities existing in the aforementioned development. Utility connections are available within the vicinity of the Project site, and no substantial extension of any utility service would be required of the Project. Additionally, the Project would not require the expansion of other existing facilities for water and wastewater based on current capacity for both. Therefore, impacts would be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. According to the City's UWMP, the City is expected to be in balance of its water budget through the year 2040.[48] The UWMP was developed taking into account planned land uses contained in the City's General Plan. Due to the fact that the Project would result in a use that aligns with the site's existing General Plan land use designation, the Project would align with the UWMP. Therefore, impacts would be less than significant.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. The Project would be required to connect to existing SKFCSD facilities. While the Project would include a new sewer connection to serve the residential development, the Project site is situated within the SKFCSD's sphere of influence. The Project has received a Will Serve letter from the SKFCSD noting that there is capacity in the City's wastewater system to serve the portion of the Project on APNs 393-121-37, 393-121-42, and 393-121-43. The Project would also be required to file all necessary applications and pay fees to the SKFCSD. Therefore, impacts would be less than significant.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. The Project would result in the generation of solid waste during construction and operational activities. During construction, the contractor would be responsible for any solid waste produced. Subsequent to the construction of the 97 single-family residences, operations would result in the generation of solid waste, recyclables, and organics. The City contracts with Mid Valley Disposal for trash collection services. Refuse collected from the site would be disposed of at the American Avenue Landfill, approximately 33 miles to the northwest of the site. According to CalRecycle, the American Avenue Landfill is projected to have capacity through the year 2031.[49] Therefore, impacts would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The Project would be required to comply with all applicable federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, there would be no impact.

[48] (City of Kingsburg, 2020)
[49] (California Department of Resources Recycling and Recovery, 2024)

4.20 WILDFIRE

Table 4-28: Wildfire Impacts

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

4.20.1 BASELINE CONDITIONS

The Project site is comprised of natural vegetation with one single-family residence and vineyards on the property. There are four parcels that would be annexed to the City of Kingsburg as part of the Project. Traditionally the land has been used for agricultural purposes. The Project site is located within the jurisdiction of the County of Fresno and receives fire protection from the Fresno County Fire Department, with additional support from the City of Kingsburg Fire Department. As mentioned in Section 4.15, the closest Kingsburg Fire Station to the Project is located at 1460 Marion St., approximately 1.5 miles south of the site and the nearest Fresno County Fire Station is located at 11500 E Mountain View, approximately 2.6 miles northwest of the site.

According to California Department of Forestry and Fire Protection (CalFire), the Project site is not located within an SRA[50], meaning CalFire does not assume responsibility for wildfire prevention and protection but, rather, the site is managed at the local level. The nearest SRA is located approximately 19 miles East of the Project Site. Furthermore, according to CalFire, the Project site is not located within a Very High Fire Hazard Severity Zone[51]. The nearest Very High Fire Hazard Severity Zone is located approximately 28 miles east of the Project Site.

[50] (CAL FIRE, 2024)
[51] (CAL FIRE, 2024)

4.20.2 IMPACT ANALYSIS

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

a-d) No Impact. The Project is not located within a very high fire hazard severity zone or an SRA. The nearest SRA is located approximately 19 miles east of the Project site and the nearest very high fire hazard severity zone is approximately 28 miles east of the Project site. The site is located on a relatively flat, vacant, and undeveloped site that is surrounded by urban uses, making wildfire unlikely to occur at the site. After annexation the Project site would be served by the Kingsburg Fire Department station located approximately 1.5 miles to the south of the site. Therefore, there would be no impact.

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

Table 4-29: CEQA Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

4.21.1 STATEMENT OF FINDINGS

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. The analysis conducted in this Initial Study/Mitigated Negative Declaration results in a determination that the Project, with incorporation of mitigation measures, would have a less than significant effect on the environment. The potential for impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources from the implementation of the Project would be less than significant with the incorporation of the mitigation measures identified in this analysis. Accordingly, the Project would involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or elimination of examples of a major period of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact. CEQA Guidelines Section 15064(i) States that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The Project involves the annexation of four parcels into the City and the construction of a 97-lot residential subdivision of approximately 33.27 acres, the effects of which would not result in significant cumulatively considerable impacts. Implementation of the Project would not result in significant cumulative impacts and all potential impacts would be less than significant through the implementation of basic regulatory requirements and Project design.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. The analysis conducted in this Initial Study/Mitigated Negative Declaration results in a determination that the Project would have a less than significant effect on the environment. All potential impacts to human beings have found to be unsubstantial and would be considered less than significant.

CHAPTER 5 MITIGATION, MONITORING, AND REPORTING PROGRAM

This MMRP has been formulated based upon the findings of the IS/MND for the Project in the City of Kingsburg. The MMRP lists mitigation measures recommended in the IS/MND for the Project and identifies monitoring and reporting requirements.

Table 5-1: Mitigation, Monitoring, and Reporting Program presents the mitigation measures identified for the Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of Table 5-1: Mitigation, Monitoring, and Reporting Program identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the Lead and Responsible Agencies to ensure that individual mitigation measures have been complied with and monitored.

Table 5-1: Mitigation, Monitoring, and Reporting Program

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Biological Resources						
BIO-1	(Swainson's Hawk and Nesting Bird Avoidance) The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.	During Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified biologist	
BIO-2	(Swainson's Hawk and Nesting Bird Pre-construction Surveys) If activities must occur within the nesting bird season (February 1 to September 15), a qualified biologist (someone familiar with these species and nesting birds) will conduct a single pre-construction take-avoidance survey for Swainson's hawk nests on the site and within a 0.5-mile radius outside of the site within seven (7) calendar days prior to the start of construction. The Swainson's hawk survey must not be completed between April 21 to June 10 due to the difficulty of identifying nests during this time of year. The survey shall also include inspecting for nesting migratory birds within the site and up to 100 feet outside of the site and for nesting raptors within the site and up to 500 feet outside of the site. All raptor nests shall be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required.	Prior to Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified biologist	
BIO-3	(Swainson's Hawk and Nesting Bird Avoidance Buffers) On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable California Department of Fish and Wildlife and/or United States Fish and Wildlife Service guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. If necessary,	During Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified biologist	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.					
BIO-4	(Maternity Bat Roost Pre-Construction Survey) If construction activities fall between March 1 and September 30 (bat maternity season) a pre-construction survey will be performed within seven (7) days prior to construction to identify active maternity bat roost locations in the existing house and barn onsite or trees within up to 100 feet of the site prior to the start of construction. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations.	Prior to Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified biologist	
BIO-5	(Bat Roost Pre-Demolition Survey) A pre-demolition survey will be performed within five (5) days prior to demolition of the existing house and barn onsite to identify any active bat roosts that could be used by pallid bats. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations. Should any roosting bats be observed, they shall be identified by species using ultrasonic recording equipment and software.	Prior to Demolition Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified biologist	
BIO-6	(Bat Avoidance Buffers) On discovery of any active maternity season bat roosts or pallid bat roosts, a qualified biologist will determine appropriate avoidance buffers based on the biology of the species, conditions of the roost(s), and the level of project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be	During Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified biologist	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	impacted by construction. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or within 100 feet of the roost.					
BIO-7	(Bat Exclusion) On discovery of any active bat roosts within the existing house or barn outside of the bat maternity season (October 1 to February 28), a qualified biologist will prepare an exclusion plan that would detail the methods to be used. It will include the tools to exclude the bat from the structure/roost (i.e., one-way doors or other devices) and the house and barn would be removed within two days. Following completion of exclusion, a report will be prepared that documents the methods and results of these efforts.	During Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified biologist	
Cultural Resources						
CUL-1	(*Archaeological Remains*) In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the Project site, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance. In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project site, all work shall be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.	During Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified archaeologist	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
CUL-2	(*Human Remains*) If human remains are uncovered during construction, the Fresno County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and Public Resources Code 5097.98 require that the coroner notify the NAHC (Native American Heritage Commission) within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.	During Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of County Coroner	
Geology and Soils						
GEO-1	Should a unique paleontological resource, site, or unique geological feature be unearthed during any stage of Project activities, work in the area of discovery will cease until the area is evaluated by a qualified geologist and/or paleontologist. If discoveries are uncovered, the Project proponent will abide by recommendations of the geologist or paleontologist.	During Construction Activities	Daily	City of Kingsburg and/or construction contractor	City of Kingsburg with assistance of a qualified geologist and/or paleontologist	
Transportation						
Tribal Cultural Resources						
See **CUL-1** and **CUL-2**.						

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APPENDICES

Appendix A: CalEEMod Output Files

Kings Estates V Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Kings Estates V
Construction Start Date	5/6/2024
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.40
Precipitation (days)	23.2
Location	36.53745446062767, -119.54987057540413
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2542
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	97.0	Dwelling Unit	33.3	189,150	1,136,147	—	310	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Energy	E-12-A	Install Alternative Type of Water Heater in Place of Gas Storage Tank Heater in Residences
Energy	E-12-B	Install Electric Space Heater in Place of Natural Gas Heaters in Residences
Energy	E-13	Install Electric Ranges in Place of Gas Ranges

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.42	3.73	36.0	33.6	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,722	6,722	0.28	0.06	1.22	6,747
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.0	34.0	11.6	14.4	0.02	0.50	0.22	0.72	0.46	0.05	0.51	—	2,729	2,729	0.11	0.05	0.03	2,746
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.00	3.88	10.6	10.4	0.02	0.46	2.29	2.75	0.42	1.02	1.44	—	1,975	1,975	0.08	0.03	0.35	1,985
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.73	0.71	1.94	1.90	< 0.005	0.08	0.42	0.50	0.08	0.19	0.26	—	327	327	0.01	0.01	0.06	329

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.42	3.73	36.0	33.6	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,722	6,722	0.28	0.06	1.22	6,747
2025	1.52	1.28	10.7	14.4	0.02	0.43	0.22	0.66	0.40	0.05	0.45	—	2,746	2,746	0.11	0.05	1.15	2,764
2026	1.44	1.22	10.1	14.3	0.02	0.38	0.22	0.61	0.35	0.05	0.40	—	2,738	2,738	0.11	0.05	1.03	2,757
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.60	1.35	11.6	14.4	0.02	0.50	0.22	0.72	0.46	0.05	0.51	—	2,729	2,729	0.11	0.05	0.03	2,746
2025	1.50	1.26	10.8	14.2	0.02	0.43	0.22	0.66	0.40	0.05	0.45	—	2,722	2,722	0.11	0.05	0.03	2,739
2026	34.0	34.0	10.2	14.0	0.02	0.38	0.22	0.61	0.35	0.05	0.40	—	2,715	2,715	0.11	0.05	0.03	2,733
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.36	1.14	10.6	10.4	0.02	0.46	2.29	2.75	0.42	1.02	1.44	—	1,975	1,975	0.08	0.02	0.16	1,985
2025	1.07	0.91	7.68	10.2	0.02	0.31	0.16	0.47	0.29	0.04	0.32	—	1,949	1,949	0.08	0.03	0.35	1,962
2026	4.00	3.88	5.38	7.50	0.01	0.21	0.11	0.32	0.19	0.03	0.22	—	1,405	1,405	0.06	0.02	0.22	1,414
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.25	0.21	1.94	1.90	< 0.005	0.08	0.42	0.50	0.08	0.19	0.26	—	327	327	0.01	< 0.005	0.03	329
2025	0.20	0.17	1.40	1.85	< 0.005	0.06	0.03	0.09	0.05	0.01	0.06	—	323	323	0.01	0.01	0.06	325
2026	0.73	0.71	0.98	1.37	< 0.005	0.04	0.02	0.06	0.03	< 0.005	0.04	—	233	233	0.01	< 0.005	0.04	234

2.3. Construction Emissions by Year, Mitigated

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

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.42	3.73	36.0	33.6	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,722	6,722	0.28	0.06	1.22	6,747
2025	1.52	1.28	10.7	14.4	0.02	0.43	0.22	0.66	0.40	0.05	0.45	—	2,746	2,746	0.11	0.05	1.15	2,764
2026	1.44	1.22	10.1	14.3	0.02	0.38	0.22	0.61	0.35	0.05	0.40	—	2,738	2,738	0.11	0.05	1.03	2,757
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.60	1.35	11.6	14.4	0.02	0.50	0.22	0.72	0.46	0.05	0.51	—	2,729	2,729	0.11	0.05	0.03	2,746
2025	1.50	1.26	10.8	14.2	0.02	0.43	0.22	0.66	0.40	0.05	0.45	—	2,722	2,722	0.11	0.05	0.03	2,739
2026	34.0	34.0	10.2	14.0	0.02	0.38	0.22	0.61	0.35	0.05	0.40	—	2,715	2,715	0.11	0.05	0.03	2,733
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.36	1.14	10.6	10.4	0.02	0.46	2.29	2.75	0.42	1.02	1.44	—	1,975	1,975	0.08	0.02	0.16	1,985
2025	1.07	0.91	7.68	10.2	0.02	0.31	0.16	0.47	0.29	0.04	0.32	—	1,949	1,949	0.08	0.03	0.35	1,962
2026	4.00	3.88	5.38	7.50	0.01	0.21	0.11	0.32	0.19	0.03	0.22	—	1,405	1,405	0.06	0.02	0.22	1,414
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.25	0.21	1.94	1.90	< 0.005	0.08	0.42	0.50	0.08	0.19	0.26	—	327	327	0.01	< 0.005	0.03	329
2025	0.20	0.17	1.40	1.85	< 0.005	0.06	0.03	0.09	0.05	0.01	0.06	—	323	323	0.01	0.01	0.06	325
2026	0.73	0.71	0.98	1.37	< 0.005	0.04	0.02	0.06	0.03	< 0.005	0.04	—	233	233	0.01	< 0.005	0.04	234

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.38	8.15	2.71	28.1	0.05	0.04	4.49	4.54	0.04	1.14	1.18	53.9	6,635	6,689	5.81	0.31	18.5	6,945
Mit.	8.38	8.15	2.70	28.1	0.05	0.04	4.49	4.54	0.04	1.14	1.18	53.9	6,028	6,082	5.71	0.30	18.5	6,332

% Reduced	< 0.5%	—	< 0.5%	< 0.5%	—	—	—	—	—	—	—	—	9%	9%	2%	4%	—	9%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.52	7.29	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	53.9	6,165	6,219	5.85	0.33	1.80	6,465
Mit.	7.52	7.29	3.02	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	53.9	5,558	5,612	5.75	0.32	1.80	5,851
% Reduced	< 0.5%	—	< 0.5%	< 0.5%	—	—	—	—	—	—	—	—	10%	10%	2%	4%	—	9%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.74	7.51	2.81	21.9	0.05	0.04	4.33	4.37	0.04	1.10	1.14	53.9	6,185	6,239	5.82	0.31	8.59	6,486
Mit.	7.73	7.51	2.80	21.9	0.05	0.04	4.33	4.37	0.04	1.10	1.14	53.9	5,578	5,632	5.72	0.30	8.59	5,873
% Reduced	< 0.5%	—	< 0.5%	< 0.5%	—	—	—	—	—	—	—	—	10%	10%	2%	4%	—	9%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.41	1.37	0.51	4.01	0.01	0.01	0.79	0.80	0.01	0.20	0.21	8.92	1,024	1,033	0.96	0.05	1.42	1,074
Mit.	1.41	1.37	0.51	4.00	0.01	0.01	0.79	0.80	0.01	0.20	0.21	8.92	923	932	0.95	0.05	1.42	972
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	2%	—	< 0.5%	2%	—	< 0.5%	—	10%	10%	2%	4%	—	9%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.50	3.29	2.65	22.6	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,511	5,511	0.23	0.27	17.1	5,614
Area	4.88	4.86	0.05	5.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,094	1,094	0.18	0.02	—	1,105

Water	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Waste	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	8.38	8.15	2.71	28.1	0.05	0.04	4.49	4.54	0.04	1.14	1.18	53.9	6,635	6,689	5.81	0.31	18.5	6,945
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.14	2.92	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,055	5,055	0.26	0.29	0.44	5,148
Area	4.37	4.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,094	1,094	0.18	0.02	—	1,105
Water	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Waste	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	7.52	7.29	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	53.9	6,165	6,219	5.85	0.33	1.80	6,465
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.11	2.90	2.79	19.2	0.05	0.04	4.33	4.37	0.04	1.10	1.14	—	5,068	5,068	0.24	0.27	7.23	5,162
Area	4.62	4.61	0.03	2.72	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.26	7.26	< 0.005	< 0.005	—	7.28
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,094	1,094	0.18	0.02	—	1,105
Water	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Waste	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	7.74	7.51	2.81	21.9	0.05	0.04	4.33	4.37	0.04	1.10	1.14	53.9	6,185	6,239	5.82	0.31	8.59	6,486
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.57	0.53	0.51	3.51	0.01	0.01	0.79	0.80	0.01	0.20	0.21	—	839	839	0.04	0.05	1.20	855
Area	0.84	0.84	< 0.005	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.20	1.20	< 0.005	< 0.005	—	1.21
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	181	181	0.03	< 0.005	—	183
Water	—	—	—	—	—	—	—	—	—	—	—	1.24	2.54	3.78	0.13	< 0.005	—	7.89
Waste	—	—	—	—	—	—	—	—	—	—	—	7.68	0.00	7.68	0.77	0.00	—	26.9

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	1.41	1.37	0.51	4.01	0.01	0.01	0.79	0.80	0.01	0.20	0.21	8.92	1,024	1,033	0.96	0.05	1.42	1,074

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.50	3.29	2.65	22.6	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,511	5,511	0.23	0.27	17.1	5,614
Area	4.88	4.86	0.05	5.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.8
Energy	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	487	487	0.08	0.01	—	492
Water	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Waste	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	8.38	8.15	2.70	28.1	0.05	0.04	4.49	4.54	0.04	1.14	1.18	53.9	6,028	6,082	5.71	0.30	18.5	6,332
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.14	2.92	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,055	5,055	0.26	0.29	0.44	5,148
Area	4.37	4.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	487	487	0.08	0.01	—	492
Water	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Waste	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	7.52	7.29	3.02	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	53.9	5,558	5,612	5.75	0.32	1.80	5,851
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.11	2.90	2.79	19.2	0.05	0.04	4.33	4.37	0.04	1.10	1.14	—	5,068	5,068	0.24	0.27	7.23	5,162
Area	4.62	4.61	0.03	2.72	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.26	7.26	< 0.005	< 0.005	—	7.28

Energy	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	487	487	0.08	0.01	—	492
Water	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Waste	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	7.73	7.51	2.80	21.9	0.05	0.04	4.33	4.37	0.04	1.10	1.14	53.9	5,578	5,632	5.72	0.30	8.59	5,873
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.57	0.53	0.51	3.51	0.01	0.01	0.79	0.80	0.01	0.20	0.21	—	839	839	0.04	0.05	1.20	855
Area	0.84	0.84	< 0.005	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.20	1.20	< 0.005	< 0.005	—	1.21
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	80.6	80.6	0.01	< 0.005	—	81.4
Water	—	—	—	—	—	—	—	—	—	—	—	1.24	2.54	3.78	0.13	< 0.005	—	7.89
Waste	—	—	—	—	—	—	—	—	—	—	—	7.68	0.00	7.68	0.77	0.00	—	26.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	1.41	1.37	0.51	4.00	0.01	0.01	0.79	0.80	0.01	0.20	0.21	8.92	923	932	0.95	0.05	1.42	972

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.10	0.10	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.05	1.79	< 0.005	0.09	—	0.09	0.08	—	0.08	—	282	282	0.01	< 0.005	—	282
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.37	0.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	46.6	46.6	< 0.005	< 0.005	—	46.8
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.61	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	92.9	92.9	0.01	< 0.005	0.37	94.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	85.6	85.6	< 0.005	0.01	0.21	89.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.02	7.02	< 0.005	< 0.005	0.01	7.14

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.04	7.04	< 0.005	< 0.005	0.01	7.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.22

3.2. Demolition (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.10	0.10	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.05	1.79	< 0.005	0.09	—	0.09	0.08	—	0.08	—	282	282	0.01	< 0.005	—	282
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.37	0.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	46.6	46.6	< 0.005	< 0.005	—	46.8
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.61	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	92.9	92.9	0.01	< 0.005	0.37	94.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	85.6	85.6	< 0.005	0.01	0.21	89.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.02	7.02	< 0.005	< 0.005	0.01	7.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.04	7.04	< 0.005	< 0.005	0.01	7.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.22

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.97	1.80	< 0.005	0.09	—	0.09	0.08	—	0.08	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	1.08	1.08	—	0.55	0.55	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	48.0	48.0	< 0.005	< 0.005	—	48.2

Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.04	0.71	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	0.01	< 0.005	0.43	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.46	5.46	< 0.005	< 0.005	0.01	5.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.90	0.90	< 0.005	< 0.005	< 0.005	0.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.97	1.80	< 0.005	0.09	—	0.09	0.08	—	0.08	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	1.08	1.08	—	0.55	0.55	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.04	0.71	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	0.01	< 0.005	0.43	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.46	5.46	< 0.005	< 0.005	0.01	5.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.90	0.90	< 0.005	< 0.005	< 0.005	0.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

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

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

Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.23	3.72	0.01	0.18	—	0.18	0.16	—	0.16	—	813	813	0.03	0.01	—	816
Dust From Material Movement	—	—	—	—	—	—	1.13	1.13	—	0.45	0.45	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.77	0.68	< 0.005	0.03	—	0.03	0.03	—	0.03	—	135	135	0.01	< 0.005	—	135
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.05	0.81	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	124	124	0.01	0.01	0.50	126
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	0.03	14.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.32	2.32	< 0.005	< 0.005	< 0.005	2.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.23	3.72	0.01	0.18	—	0.18	0.16	—	0.16	—	813	813	0.03	0.01	—	816
Dust From Material Movement	—	—	—	—	—	—	1.13	1.13	—	0.45	0.45	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.77	0.68	< 0.005	0.03	—	0.03	0.03	—	0.03	—	135	135	0.01	< 0.005	—	135
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.05	0.81	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	124	124	0.01	0.01	0.50	126

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	0.03	14.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.32	2.32	< 0.005	< 0.005	< 0.005	2.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.28	2.67	< 0.005	0.10	—	0.10	0.09	—	0.09	—	488	488	0.02	< 0.005	—	490
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.42	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	80.8	80.8	< 0.005	< 0.005	—	81.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.09	1.42	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	216	216	0.01	0.01	0.86	220
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	0.36	145
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.11	1.15	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	192	192	0.01	0.01	0.02	195
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	0.01	145
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.02	0.24	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.5	40.5	< 0.005	< 0.005	0.08	41.2
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	0.03	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.70	6.70	< 0.005	< 0.005	0.01	6.81
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.68	4.68	< 0.005	< 0.005	0.01	4.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.29	0.24	2.28	2.67	< 0.005	0.10	—	0.10	0.09	—	0.09	—	488	488	0.02	< 0.005	—	490
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.42	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	80.8	80.8	< 0.005	< 0.005	—	81.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.09	1.42	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	216	216	0.01	0.01	0.86	220
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	0.36	145
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.11	1.15	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	192	192	0.01	0.01	0.02	195
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	0.01	145
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.24	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.5	40.5	< 0.005	< 0.005	0.08	41.2
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	0.03	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.70	6.70	< 0.005	< 0.005	0.01	6.81
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.68	4.68	< 0.005	< 0.005	0.01	4.89

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

3.9. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.18	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.08	1.30	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	212	212	0.01	0.01	0.79	215
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.35	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.10	1.05	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	188	188	0.01	0.01	0.02	191
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	137	137	< 0.005	0.02	0.01	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	0.76	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	139	139	0.01	0.01	0.24	141
Vendor	0.01	< 0.005	0.16	0.07	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	97.5	97.5	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.14	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.04	23.4
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2025) - Mitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.08	1.30	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	212	212	0.01	0.01	0.79	215
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.35	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.10	1.05	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	188	188	0.01	0.01	0.02	191
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	137	137	< 0.005	0.02	0.01	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	0.76	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	139	139	0.01	0.01	0.24	141
Vendor	0.01	< 0.005	0.16	0.07	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	97.5	97.5	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.14	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.04	23.4
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2026) - Unmitigated

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

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

Off-Road Equipm	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	4.47	5.89	0.01	0.17	—	0.17	0.16	—	0.16	—	1,088	1,088	0.04	0.01	—	1,092
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.82	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.07	1.20	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	207	207	0.01	0.01	0.72	211
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	134	134	< 0.005	0.02	0.31	140
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	0.97	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	184	184	0.01	0.01	0.02	187
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	134	134	< 0.005	0.02	0.01	140
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	86.5	86.5	< 0.005	< 0.005	0.14	88.0
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.8	60.8	< 0.005	0.01	0.06	63.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.02	14.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.58	0.49	4.47	5.89	0.01	0.17	—	0.17	0.16	—	0.16	—	1,088	1,088	0.04	0.01	—	1,092
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.11	0.09	0.82	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.07	1.20	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	207	207	0.01	0.01	0.72	211
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	134	134	< 0.005	0.02	0.31	140
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	0.97	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	184	184	0.01	0.01	0.02	187
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	134	134	< 0.005	0.02	0.01	140
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	86.5	86.5	< 0.005	< 0.005	0.14	88.0
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.8	60.8	< 0.005	0.01	0.06	63.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.02	14.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.68	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	145
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.51	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	89.0	89.0	< 0.005	< 0.005	0.31	90.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.42	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.1	79.1	< 0.005	< 0.005	0.01	80.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.85	7.85	< 0.005	< 0.005	0.01	7.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.09	0.07	0.68	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	145
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.03	0.51	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	89.0	89.0	< 0.005	< 0.005	0.31	90.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.42	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.1	79.1	< 0.005	< 0.005	0.01	80.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.85	7.85	< 0.005	< 0.005	0.01	7.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	33.8	33.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.8
Architectural Coatings	3.24	3.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.12	2.12	< 0.005	< 0.005	—	2.13
Architectural Coatings	0.59	0.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.8	36.8	< 0.005	< 0.005	< 0.005	37.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.66	3.66	< 0.005	< 0.005	0.01	3.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	33.8	33.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.8
Architectural Coatings	3.24	3.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.12	2.12	< 0.005	< 0.005	—	2.13
Architectural Coatings	0.59	0.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.8	36.8	< 0.005	< 0.005	< 0.005	37.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.66	3.66	< 0.005	< 0.005	0.01	3.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.50	3.29	2.65	22.6	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,511	5,511	0.23	0.27	17.1	5,614
Total	3.50	3.29	2.65	22.6	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,511	5,511	0.23	0.27	17.1	5,614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.14	2.92	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,055	5,055	0.26	0.29	0.44	5,148
Total	3.14	2.92	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,055	5,055	0.26	0.29	0.44	5,148
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.57	0.53	0.51	3.51	0.01	0.01	0.79	0.80	0.01	0.20	0.21	—	839	839	0.04	0.05	1.20	855
Total	0.57	0.53	0.51	3.51	0.01	0.01	0.79	0.80	0.01	0.20	0.21	—	839	839	0.04	0.05	1.20	855

4.1.2. Mitigated

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

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

Single Family Housing	3.50	3.29	2.65	22.6	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,511	5,511	0.23	0.27	17.1	5,614
Total	3.50	3.29	2.65	22.6	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,511	5,511	0.23	0.27	17.1	5,614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.14	2.92	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,055	5,055	0.26	0.29	0.44	5,148
Total	3.14	2.92	3.03	19.8	0.05	0.04	4.49	4.53	0.04	1.14	1.18	—	5,055	5,055	0.26	0.29	0.44	5,148
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.57	0.53	0.51	3.51	0.01	0.01	0.79	0.80	0.01	0.20	0.21	—	839	839	0.04	0.05	1.20	855
Total	0.57	0.53	0.51	3.51	0.01	0.01	0.79	0.80	0.01	0.20	0.21	—	839	839	0.04	0.05	1.20	855

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,094	1,094	0.18	0.02	—	1,105
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,094	1,094	0.18	0.02	—	1,105
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,094	1,094	0.18	0.02	—	1,105
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,094	1,094	0.18	0.02	—	1,105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	181	181	0.03	< 0.005	—	183
Total	—	—	—	—	—	—	—	—	—	—	—	—	181	181	0.03	< 0.005	—	183

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	499	499	0.08	0.01	—	504
Total	—	—	—	—	—	—	—	—	—	—	—	—	499	499	0.08	0.01	—	504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	499	499	0.08	0.01	—	504
Total	—	—	—	—	—	—	—	—	—	—	—	—	499	499	0.08	0.01	—	504
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	82.6	82.6	0.01	< 0.005	—	83.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	82.6	82.6	0.01	< 0.005	—	83.5

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-12.1	-12.1	> -0.005	> -0.005	—	-12.1

Total	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-12.1	-12.1	> -0.005	> -0.005	—	-12.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-12.1	-12.1	> -0.005	> -0.005	—	-12.1
Total	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-12.1	-12.1	> -0.005	> -0.005	—	-12.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.00	-2.00	> -0.005	> -0.005	—	-2.01
Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.00	-2.00	> -0.005	> -0.005	—	-2.01

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.05	4.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.51	0.48	0.05	5.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.8
Total	4.88	4.86	0.05	5.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.05	4.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.37	4.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.74	0.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.04	< 0.005	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.20	1.20	< 0.005	< 0.005	—	1.21
Total	0.84	0.84	< 0.005	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.20	1.20	< 0.005	< 0.005	—	1.21

4.3.2. Mitigated

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

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

Consumer Products	4.05	4.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.51	0.48	0.05	5.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.8
Total	4.88	4.86	0.05	5.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.05	4.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.37	4.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.74	0.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.04	< 0.005	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.20	1.20	< 0.005	< 0.005	—	1.21

Total	0.84	0.84	< 0.005	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.20	1.20	< 0.005	< 0.005	—	1.21

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Total	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Total	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.24	2.54	3.78	0.13	< 0.005	—	7.89
Total	—	—	—	—	—	—	—	—	—	—	—	1.24	2.54	3.78	0.13	< 0.005	—	7.89

4.4.2. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Total	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Total	—	—	—	—	—	—	—	—	—	—	—	7.49	15.3	22.8	0.77	0.02	—	47.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.24	2.54	3.78	0.13	< 0.005	—	7.89
Total	—	—	—	—	—	—	—	—	—	—	—	1.24	2.54	3.78	0.13	< 0.005	—	7.89

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Total	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Total	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.68	0.00	7.68	0.77	0.00	—	26.9
Total	—	—	—	—	—	—	—	—	—	—	—	7.68	0.00	7.68	0.77	0.00	—	26.9

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Total	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Total	—	—	—	—	—	—	—	—	—	—	—	46.4	0.00	46.4	4.64	0.00	—	162
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.68	0.00	7.68	0.77	0.00	—	26.9
Total	—	—	—	—	—	—	—	—	—	—	—	7.68	0.00	7.68	0.77	0.00	—	26.9

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	5/6/2024	6/17/2024	5.00	30.0	—
Site Preparation	Site Preparation	6/18/2024	7/16/2024	5.00	20.0	—
Grading	Grading	7/17/2024	9/18/2024	5.00	45.0	—
Building Construction	Building Construction	9/19/2024	8/20/2026	5.00	500	—
Paving	Paving	8/21/2026	10/9/2026	5.00	35.0	—
Architectural Coating	Architectural Coating	10/10/2026	11/28/2026	5.00	35.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	7.70	LDA,LDT1,LDT2
Demolition	Vendor	—	4.00	HHDT,MHDT
Demolition	Hauling	1.20	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	4.00	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	20.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	4.00	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	34.9	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	10.4	4.00	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	—	4.00	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.98	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	4.00	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	7.70	LDA,LDT1,LDT2
Demolition	Vendor	—	4.00	HHDT,MHDT
Demolition	Hauling	1.20	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	4.00	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	4.00	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	34.9	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	10.4	4.00	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	—	4.00	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.98	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	4.00	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	383,029	127,676	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	3,100	—
Site Preparation	—	—	30.0	0.00	—
Grading	—	—	135	0.00	—
Paving	0.00	0.00	0.00	0.00	1.07

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	1.07	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	916	925	829	330,227	6,287	6,354	5,695	2,267,435

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	916	925	829	330,227	6,287	6,354	5,695	2,267,435

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
383028.75	127,676	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	1,957,934	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	893,145	204	0.0330	0.0040	-37,755

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	3,908,712	19,061,936

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	3,908,712	19,061,936

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	86.1	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	86.1	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	34.2	annual days of extreme heat
Extreme Precipitation	1.10	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.7
AQ-PM	95.7
AQ-DPM	48.1
Drinking Water	97.8
Lead Risk Housing	46.3
Pesticides	96.8
Toxic Releases	50.9
Traffic	24.1
Effect Indicators	—

CleanUp Sites	50.3
Groundwater	64.5
Haz Waste Facilities/Generators	53.5
Impaired Water Bodies	23.9
Solid Waste	64.4
Sensitive Population	—
Asthma	77.4
Cardio-vascular	64.4
Low Birth Weights	12.1
Socioeconomic Factor Indicators	—
Education	49.4
Housing	30.6
Linguistic	45.4
Poverty	50.9
Unemployment	29.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	53.93301681
Employed	56.93571154
Median HI	49.37764661
Education	—
Bachelor's or higher	58.65520339
High school enrollment	20.46708585
Preschool enrollment	38.90671115
Transportation	—

Auto Access	66.18760426
Active commuting	62.15834723
Social	—
2-parent households	88.02771718
Voting	64.55793661
Neighborhood	—
Alcohol availability	73.63018093
Park access	33.18362633
Retail density	13.67894264
Supermarket access	38.97087129
Tree canopy	33.31194662
Housing	—
Homeownership	58.4370589
Housing habitability	63.33889388
Low-inc homeowner severe housing cost burden	98.08802772
Low-inc renter severe housing cost burden	63.24906968
Uncrowded housing	37.66200436
Health Outcomes	—
Insured adults	44.70678814
Arthritis	0.0
Asthma ER Admissions	28.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	64.6

Cognitively Disabled	48.3
Physically Disabled	39.7
Heart Attack ER Admissions	41.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	79.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	49.5
English Speaking	67.2
Foreign-born	17.6
Outdoor Workers	17.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	70.5
Traffic Density	12.0
Traffic Access	0.0
Other Indices	—
Hardship	49.7
Other Decision Support	—

2016 Voting	62.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	54.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	lot acreage
Operations: Hearths	No hearths
Operations: Water and Waste Water	Per 2020 UWMP
Operations: Energy Use	All electric development

Health Risk Assessments Results
Construction - Cancer

**HARP - Air Dispersion Modeling and Risk Tool v22118

**9/5/2024

**Exported Risk Results

REC	GRP	NETID	X	Y	RISK_SUM	SCENARIO	INHAL_RIS	SOIL_RISK	DERMAL_R
1	SENSITIV		271638	4046404	3.3063E-0	2.6YrCanc	3.3063E-0	0	0
2	SENSITIV		271803	4046403	3.9918E-0	2.6YrCanc	3.9918E-0	0	0
3	SENSITIV		271938	4046436	2.0881E-0	2.6YrCanc	2.0881E-0	0	0
4	SENSITIV		271982	4046715	4.678E-09	2.6YrCanc	4.678E-09	0	0
5	SENSITIV		271872	4046800	6.8548E-0	2.6YrCanc	6.8548E-0	0	0
6	SENSITIV		271217	4046629	4.9519E-0	2.6YrCanc	4.9519E-0	0	0

MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISI	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_I	EGG_RISK
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Health Risk Assessments Results
Construction - Chronic

**HARP - Air Dispersion Modeling and Risk Tool v22118

**9/5/2024

**Exported Risk Results

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	
1	SENSITIV		271638	4046404	NonCancer	0	0	0	0	
2	SENSITIV		271803	4046403	NonCancer	0	0	0	0	
3	SENSITIV		271938	4046436	NonCancer	0	0	0	0	
4	SENSITIV		271982	4046715	NonCancer	0	0	0	0	
5	SENSITIV		271872	4046800	NonCancer	0	0	0	0	
6	SENSITIV		271217	4046629	NonCancer	0	0	0	0	

GILV	REPRO/DE	RESP	SKIN	EYE	BONE/TEE	ENDO	BLOOD	ODOR	GENERAL
0	0	1.8095E-05	0	0	0	0	0	0	0
0	0	2.1846E-05	0	0	0	0	0	0	0
0	0	1.1428E-05	0	0	0	0	0	0	0
0	0	2.5601E-06	0	0	0	0	0	0	0
0	0	3.7515E-06	0	0	0	0	0	0	0
0	0	2.71E-06	0	0	0	0	0	0	0

MAXHI
1.8095E-05
2.1846E-05
1.1428E-05
2.5601E-06
3.7515E-06
2.71E-06

Health Risk Assessments Results
Construction - Acute

**HARP - Air Dispersion Modeling and Risk Tool v22118

**9/5/2024

**Exported Risk Results

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	
1	SENSITIV		271638	4046404	NonCancer	0	0	0	0	
2	SENSITIV		271803	4046403	NonCancer	0	0	0	0	
3	SENSITIV		271938	4046436	NonCancer	0	0	0	0	
4	SENSITIV		271982	4046715	NonCancer	0	0	0	0	
5	SENSITIV		271872	4046800	NonCancer	0	0	0	0	
6	SENSITIV		271217	4046629	NonCancer	0	0	0	0	

GILV	REPRO/DE'	RESP	SKIN	EYE	BONE/TEE	ENDO	BLOOD	ODOR	GENERAL
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0

MAXHI

0

0

0

0

0

0

Health Risk Assessments Results
Operations - Cancer

**HARP - Air Dispersion Modeling and Risk Tool v22118

**9/6/2024

**Exported Risk Results

REC	GRP	NETID	X	Y	RISK_SUM	SCENARIO	INHAL_RIS	SOIL_RISK	DERMAL_R
1	SENSITIV		271638	4046404	3.6166E-09	2.6YrCanc	3.6166E-09	0	0
2	SENSITIV		271803	4046403	4.3664E-09	2.6YrCanc	4.3664E-09	0	0
3	SENSITIV		271938	4046436	2.2841E-09	2.6YrCanc	2.2841E-09	0	0
4	SENSITIV		271982	4046715	5.117E-10	2.6YrCanc	5.117E-10	0	0
5	SENSITIV		271872	4046800	7.4981E-10	2.6YrCanc	7.4981E-10	0	0
6	SENSITIV		271217	4046629	5.4166E-10	2.6YrCanc	5.4166E-10	0	0

MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISI	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_I	EGG_RISK
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Health Risk Assessments Results
Operations - Chronic

**HARP - Air Dispersion Modeling and Risk Tool v22118

**9/6/2024

**Exported Risk Results

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	
1	SENSITIV		271638	4046404	NonCancer	0	0	0	0	
2	SENSITIV		271803	4046403	NonCancer	0	0	0	0	
3	SENSITIV		271938	4046436	NonCancer	0	0	0	0	
4	SENSITIV		271982	4046715	NonCancer	0	0	0	0	
5	SENSITIV		271872	4046800	NonCancer	0	0	0	0	
6	SENSITIV		271217	4046629	NonCancer	0	0	0	0	

GILV	REPRO/DE	RESP	SKIN	EYE	BONE/TEE	ENDO	BLOOD	ODOR	GENERAL
0	0	1.9793E-06	0	0	0	0	0	0	0
0	0	2.3896E-06	0	0	0	0	0	0	0
0	0	1.25E-06	0	0	0	0	0	0	0
0	0	2.8004E-07	0	0	0	0	0	0	0
0	0	4.1035E-07	0	0	0	0	0	0	0
0	0	2.9644E-07	0	0	0	0	0	0	0

MAXHI
1.9793E-06
2.3896E-06
1.25E-06
2.8004E-07
4.1035E-07
2.9644E-07

Health Risk Assessments Results
Operations - Acute

**HARP - Air Dispersion Modeling and Risk Tool v22118

**9/6/2024

**Exported Risk Results

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	
1	SENSITIV		271638	4046404	NonCancer	0	0	0	0	
2	SENSITIV		271803	4046403	NonCancer	0	0	0	0	
3	SENSITIV		271938	4046436	NonCancer	0	0	0	0	
4	SENSITIV		271982	4046715	NonCancer	0	0	0	0	
5	SENSITIV		271872	4046800	NonCancer	0	0	0	0	
6	SENSITIV		271217	4046629	NonCancer	0	0	0	0	

GILV	REPRO/DE'	RESP	SKIN	EYE	BONE/TEE	ENDO	BLOOD	ODOR	GENERAL
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0

MAXHI

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Appendix B: Biological Resources Memo

PROVOST&PRITCHARD
CONSULTING GROUP

455 W Fir Ave • Clovis, CA 93611 • (559) 449-2700
www.provostandpritchard.com

MEMORANDUM

To:	Holly Owen, Community Development Director City of Kingsburg
From:	Shaylea Stark, Biologist, and Geoff Cline, Principal Biologist
Subject:	Biological Evaluation of the Kings Estates V Project
Date:	August 27, 2024

Biological Evaluation

West Star Construction Company, Inc. has proposed the Kings Estates V Project (project), which would annex four parcels into the City of Kingsburg city limits and develop three of the parcels into a residential subdivision. The 42.52 acres project site (site) is located to the west of South Mendocino Avenue and adjacent to the northern border of the City of Kingsburg (see **Figure 1**). The three parcels that would be developed into the residential subdivision (Assessor's Parcel Numbers (APN) 393-121-37, -42, & -43) are 33.27 acres in size, and have historically been used for agricultural and rural residential use. The fourth parcel (APN 393-121-46) that has been included in the project's annexation but has not been proposed for development at this time is 9.25 acres in size. The residential subdivision would construct 97 single family residential lots, an approximately 0.99-acre park, and an approximately 1.34-acre stormwater basin, which would connect to an existing stormwater basin immediately south of the site.

This biological evaluation describes the existing conditions of the site, sensitive resources that may be impacted by project-related activities, and proposed mitigation measures to reduce the level of impacts as required by the California Environmental Quality Act (CEQA). The existing conditions were determined by investigating various online sources, such as the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC), iNaturalist, California Herps, California Native Plant Society (CNPS), Google Earth, United States Department of Agriculture's (USDA) Web Soil Survey. Sensitive resources that may potentially be impacted by the project were determined by conducting a search of the CNDDB for special status species within five miles of the site (see **Attachment C**), a search of the IPaC for the site (**Attachment D**), and using the results of these investigations and searches, as well as professional knowledge of the preferred habitats for special status species to determine potential impacts to sensitive resources. Mitigation measures were then proposed to avoid or minimize potential impacts to the sensitive resources with the potential to be impacted by the project. As follows are details on the existing conditions, sensitive resources, and proposed mitigation measures.

Existing Conditions

The section describes the details on the topography, climate, waters, soils, and biotic habitats of the site.

Topography

Within the United States Geological Survey *Selma* 7.5 minute quadrangle, the site is located in the southwest portion of Section 14, Township 16 South, Range 22 East (see **Figure 2**), and the topography within the site is relatively flat with elevations at approximately 308 feet above mean sea level.

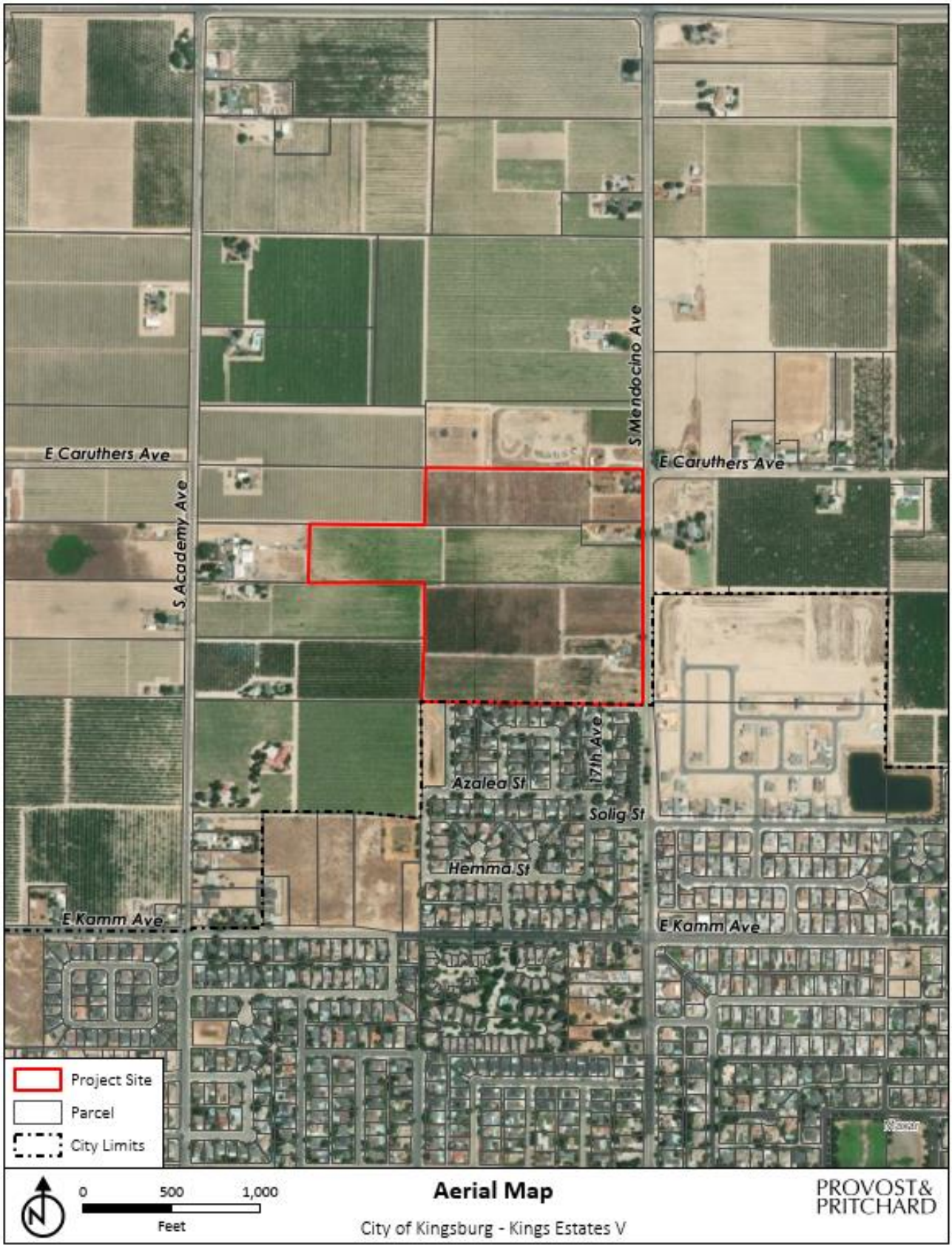

Figure 1: Project Site Map

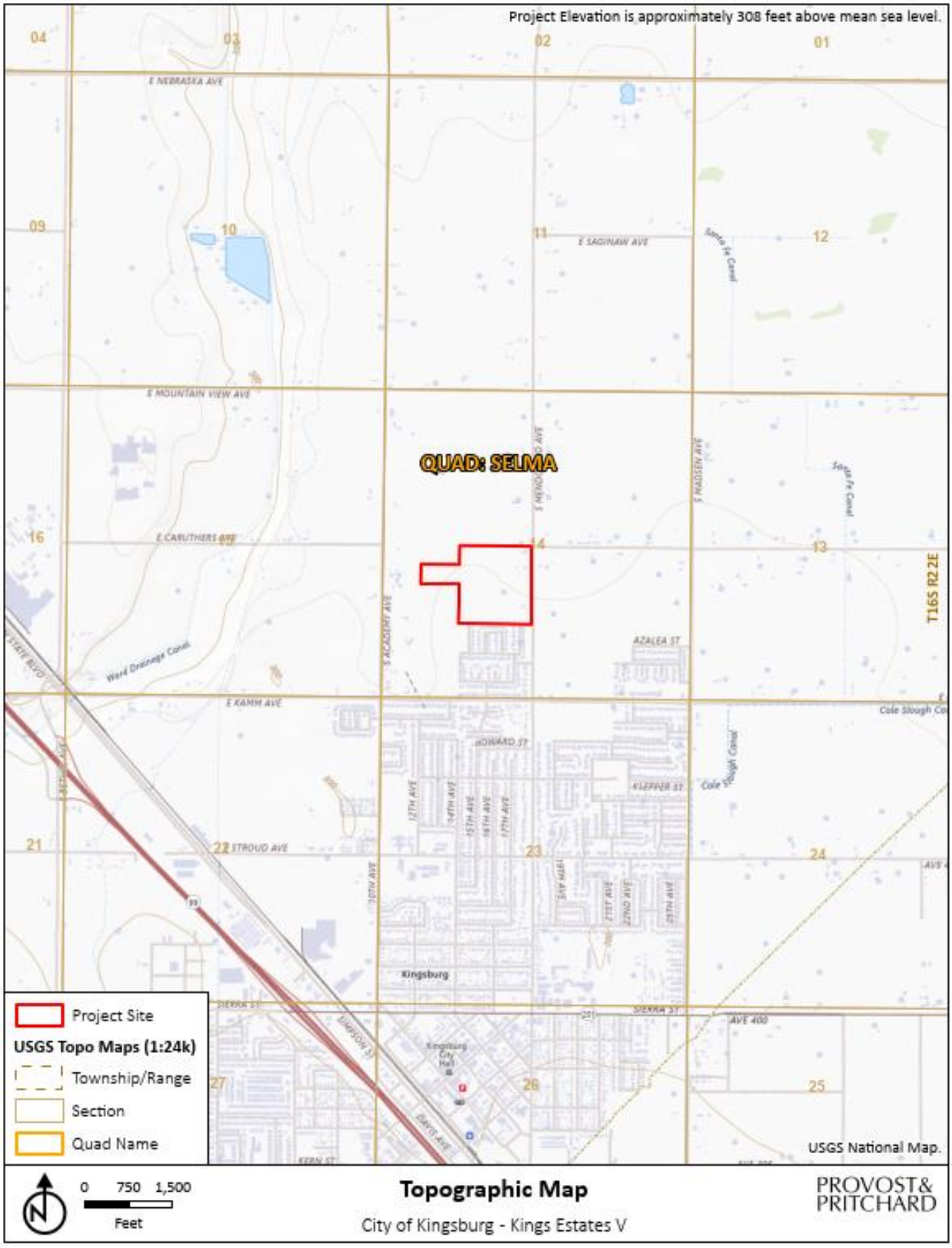

Figure 2: Topographic Map

Climate

Like most of California, the site experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. In the summer, average high temperatures range between 90- and 99-degrees Fahrenheit (°F), but do not often exceed 104 °F, and the humidity is generally low. Winter temperatures are often below 60°F during the day and rarely exceed 65°F. On average, the City of Kingsburg receives approximately 8 inches of precipitation in the form of rain yearly, most of which occurs between October and May (WeatherSpark, 2024), and the site would be expected to receive similar amounts of precipitation.

Waters

The nearest surface water is the Kingsburg Branch Canal, approximately 0.4 miles directly west of the site. This canal would not be impacted by the project.

Soils

Three soil mapping units representing three soil types were identified within the site and are listed in Table 1 (see Attachment B for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. These soils are primarily used for urban residential or commercial development, and growing a range of fruits, vegetables, and general farm crops.

Table 1: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Delhi	Sand, 0 to 3 percent slopes	29.6 %	Predominantly nonhydric	Somewhat excessively drained	Rapid	Very low
Hanford	Fine sandy loam	54.4%	Predominantly nonhydric	Well drained	Moderately rapid	Very low
Tujunga	Loamy sand, 0 to 3 percent slopes	16.0%	Predominantly nonhydric	Somewhat excessively drained	Moderately rapid	Very low

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. None of the major or minor soils units were identified as hydric.

Biotic Habitat

The site appears to contain ruderal/agricultural habitat. APN 393-121-37 appears to be comprised of ruderal vegetation, APN 393-121-42 appears to be comprised of vineyards, and APN 393-121-43 appears to be comprised of a single-family residence and ruderal vegetation that would all be removed during project activities (see Attachment A for Google Earth photos). The site is surrounded by residential neighborhoods to the south and east, and agricultural areas to the north and west.

Sensitive Resources

This section describes the details on the special status species, migratory birds, designated habitat and communities, and wildlife movement corridors and native wildlife nursery sites that could be impacted by project-related activities.

Special Status Species

No special status plants were found to occur within five miles of the site. Eleven special status animal species have occurred or may occur within five miles of the site and are listed in Table 2, below.

Table 2: List of Special Status Species with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
California tiger salamander – central California DPS (*Ambystoma californiense*)	FT, CT	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	**Unlikely.** The site appeared to lack suitable habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 3 miles south of the site at an unknown date but is listed as extirpated.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats.	**Unlikely.** The site appeared to lack suitable vegetation and habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 3 miles northwest of the site in 1912.
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	FE, CE	An inhabitant of alkali sinks and open grassland habitats in Merced, Kings, Fresno, and Madera counties. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses. The most recent recorded observation of this species in California was in 1992 in Fresno County.	**Unlikely.** The site appeared to lack suitable habitats for this species. There are no recorded observations of this species on CNDDB within the regional vicinity of the project.
Monarch butterfly (*Danaus plexippus*)	FC	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Absent.** The site appeared to lack suitable habitats for this species.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Unlikely.** The site appeared to lack suitable aquatic and upland habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 15.5 miles northeast of the site at an unknown date.
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Possible.** The site appeared to contain a residential house and barn where this species could roost. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles east of the site in 2001.

Species	Status*	Habitat	Occurrence within the Site
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Opportunistically forages in a variety of habitats. Dens in burrows within alkali sink, valley grassland, and woodland habitats in valleys and adjacent foothills and in human-made structures in cities, rangeland, and agricultural areas.	**Unlikely.** The site appeared to lack suitable habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 9.5 miles southwest of the site in 1975.
Swainson's hawk (*Buteo swainsoni*)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	**Possible.** While the site appeared to lack suitable trees for this species to nest, trees in the surrounding areas appear to provide nesting habitat and the nearest recorded observation of this species within the vicinity was approximately 0.3 miles south of the site in 1926.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal and seasonal pools, with clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Unlikely.** The site appeared to lack suitable habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 10 miles southeast of the site in 1993.
Western spadefoot (*Spea hammondii*)	FPT, CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	**Unlikely.** The site appeared to lack suitable aquatic and upland habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 9.5 miles southeast of the site in 2011.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds.	**Unlikely.** The site appeared to lack suitable nesting habitats for this species. The nearest recorded observation of this species within the vicinity was approximately 3 miles northwest of the site in 1898.

*EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES

Present: Species observed on the site at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the site, but it could occur there from time to time.

Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
FC	Federal Candidate	CSSC	California Species of Special Concern

Migratory Birds

Migratory birds are protected by the Migratory Bird Treaty Act and California Fish and Game code. There are numerous regulations with each law, but generally, most negative impacts to a migratory bird are illegal. Birds are more vulnerable during the nesting season, and they can nest on the ground, and in shrubs, trees, and other natural and unnatural structures. At the site, birds could nest on the ground or within the existing residence and could be impacted by project activities.

Designated Habitats and Communities

The USFWS often designates areas of "Critical Habitat" when it lists species as threatened or endangered. Critical Habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species and would require special management or protection. According to CNDDB and IPaC, designated critical habitat is absent from the site and vicinity.

The CDFW also designates "natural communities of special concern" and has jurisdiction over most riparian habitat. Natural communities of special concern are defined by distinguished, significant biological diversity, or a home to special status species. Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. According to CNDDB and Google Earth, the site does not appear to contain any natural communities of special concern or riparian habitat.

Wildlife Movement Corridors and Native Wildlife Nursery Sites

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation. No features within the site would be expected to serve as a wildlife movement corridor.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. The site contained a residential house and a barn where bat species could roost, which would be considered a native wildlife nursery site.

Proposed Mitigation Measures

Based on the investigations and searches completed, the project has the potential to impact a number of sensitive resources. While the site does not appear to provide nesting habitat for Swainson's hawk, they could nest within the vicinity of the site and be disturbed by project-related activities when they are nesting. Additionally, the site appears to provide potential roosting habitat for pallid bat within the residential house and barn. The site also appears to provide nesting habitat for various migratory birds that could nest on the ground or in the barn, and maternity roosting bats may utilize the house and barn as a wildlife nursery site. Projects that adversely impact these sensitive resources would be considered a potentially significant impact under CEQA and may violate any State and/or federal laws that protect these resources. The following mitigation measures are proposed to protect these resources.

> Mitigation Measure BIO-1 (*Swainson's Hawk and Nesting Bird Avoidance*): The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

Mitigation Measure BIO-2 (*Swainson's Hawk and Nesting Bird Pre-construction Surveys*): If activities must occur within the nesting bird season (February 1 to September 15), a qualified biologist (someone familiar with these species and nesting birds) will conduct a single pre-construction take-avoidance survey for Swainson's hawk nests on the site and within a 0.5-mile radius outside of the site within seven (7) calendar days prior to the start of construction. The Swainson's hawk survey must not be completed between April 21 to June 10 due to the difficulty of identifying nests during this time of year. The survey shall also include inspecting for nesting migratory birds within the site and up to 100 feet outside of the site and for nesting raptors within the site and up to 500 feet outside of the site. All raptor nests shall be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required.

Mitigation Measure BIO-3 (*Swainson's Hawk and Nesting Bird Avoidance Buffers*): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

Mitigation Measure BIO-4 (*Maternity Bat Roost Pre-Construction Survey*): If construction activities fall between March 1 and September 30 (bat maternity season) a pre-construction survey will be performed within seven (7) days prior to construction to identify active maternity bat roost locations in the existing house and barn onsite or trees within up to 100 feet of the site prior to the start of construction. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations.

Mitigation Measure BIO-5 (*Bat Roost Pre-Demolition Survey*): A pre-demolition survey will be performed within five (5) days prior to demolition of the existing house and barn onsite to identify any active bat roosts that could be used by pallid bats. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations. Should any roosting bats be observed, they shall be identified by species using ultrasonic recording equipment and software.

Mitigation Measure BIO-6 (Bat *Avoidance Buffers*): On discovery of any active maternity season bat roosts or pallid bat roosts, a qualified biologist will determine appropriate avoidance buffers based on the biology of the species, conditions of the roost(s), and the level of project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or within 100 feet of the roost.

Mitigation Measure BIO-7 (*Bat Exclusion*): On discovery of any active bat roosts within the existing house or barn outside of the bat maternity season (October 1 to February 28), a qualified biologist will prepare an exclusion plan that would detail the methods to be used. It will include the tools to exclude the bat from the structure/roost (i.e., one-way doors or other devices) and the house and barn would be removed within two days. Following completion of exclusion, a report will be prepared that documents the methods and results of these efforts.

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Attachment A- Aerial Photos of Project Area

Overview of project site from South Mendocino Avenue. Imagery date 3/2024.

Overview of project site from 14th Avenue. Imagery date 3/2024.

Overview of project site from South Mendocino Avenue showing the vineyards, house, and barn to be removed. Imagery dated 3/2024.

Overview of project site from South Mendocino Avenue showing ruderal habitat and the house and barn to be removed. Imagery date 3/2024.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eastern Fresno Area, California

Kings Estates V Project

August 21, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,430 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eastern Fresno Area, California
Survey Area Data: Version 16, Aug 31, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 16, 2022—May 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DeA	Delhi sand, 0 to 3 percent slopes, MLRA 17	12.5	29.6%
Hm	Hanford fine sandy loam	23.1	54.4%
TzbA	Tujunga loamy sand, 0 to 3 percent slopes	6.8	16.0%
Totals for Area of Interest		**42.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eastern Fresno Area, California

DeA—Delhi sand, 0 to 3 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2ss8n
Elevation: 30 to 1,400 feet
Mean annual precipitation: 9 to 16 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 225 to 310 days
Farmland classification: Not prime farmland

Map Unit Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Delhi

Setting

Landform: Dunes on valleys
Landform position (two-dimensional): Toeslope, backslope
Landform position (three-dimensional): Rise
Microfeatures of landform position: Hummocks
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Wind modified sandy alluvium derived from granitoid

Typical profile

Ap - 0 to 8 inches: sand
C1 - 8 to 40 inches: sand
C2 - 40 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: R017XY906CA - Non-Alkali San Joaquin Valley Desert
Hydric soil rating: No

Minor Components

Hanford
Percent of map unit: 5 percent
Hydric soil rating: No

Grangeville
Percent of map unit: 4 percent
Hydric soil rating: No

Dello
Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Tujunga
Percent of map unit: 3 percent
Hydric soil rating: No

Hm—Hanford fine sandy loam

Map Unit Setting
National map unit symbol: hl5p
Elevation: 200 to 500 feet
Mean annual precipitation: 8 to 15 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 250 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Hanford and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hanford

Setting
Landform: Flood plains, alluvial fans
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile
A - 0 to 16 inches: fine sandy loam
C - 16 to 72 inches: fine sandy loam

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: A
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Minor Components

Unnamed, loam

Percent of map unit: 10 percent
Landform: Flood plains
Hydric soil rating: No

Unnamed, steeper slopes

Percent of map unit: 4 percent
Landform: Benches
Hydric soil rating: No

Unnamed

Percent of map unit: 1 percent
Landform: Drainageways on flood plains
Hydric soil rating: Yes

TzbA—Tujunga loamy sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: hlc1
Elevation: 180 to 400 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 62 to 64 degrees F
Frost-free period: 225 to 275 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Tujunga and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tujunga

Setting

Landform: Alluvial fans, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

A - 0 to 4 inches: loamy sand
C - 4 to 60 inches: stratified sand to loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R017XY906CA - Non-Alkali San Joaquin Valley Desert
Hydric soil rating: No

Minor Components

Unnamed, loamy coarse sand

Percent of map unit: 12 percent
Landform: Flood plains, alluvial fans
Hydric soil rating: No

Unnamed, compact substratum

Percent of map unit: 2 percent
Landform: Flood plains, alluvial fans
Hydric soil rating: No

Unnamed, flooded

Percent of map unit: 1 percent
Landform: Flood plains
Hydric soil rating: Yes

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Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Malaga (3611966) OR Sanger (3611965) OR Wahtoke (3611964) OR Conejo (3611956) OR Selma (3611955) OR Reedley (3611954) OR Traver (3611944) OR Burris Park (3611945) OR Laton (3611946))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
alkali-sink goldfields *Lasthenia chrysantha*	PDAST5L030	None	None	G2	S2	1B.1
American bumble bee *Bombus pensylvanicus*	IIHYM24260	None	None	G3G4	S2	
Antioch efferian robberfly *Efferia antiochi*	IIDIP07010	None	None	G1G2	S1S2	
bristly sedge *Carex comosa*	PMCYP032Y0	None	None	G5	S2	2B.1
brittlescale *Atriplex depressa*	PDCHE042L0	None	None	G2	S2	1B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S2	SSC
California alkali grass *Puccinellia simplex*	PMPOA53110	None	None	G2	S2	1B.2
California glossy snake *Arizona elegans occidentalis*	ARADB01017	None	None	G5T2	S2	SSC
California jewelflower *Caulanthus californicus*	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
California satintail *Imperata brevifolia*	PMPOA3D020	None	None	G3	S3	2B.1
California tiger salamander - central California DPS *Ambystoma californiense pop. 1*	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G4	S4	SSC
Crotch's bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
Earlimart orache *Atriplex cordulata var. erecticaulis*	PDCHE042V0	None	None	G3T1	S1	1B.2
foothill yellow-legged frog - south Sierra DPS *Rana boylii pop. 5*	AAABH01055	Endangered	Endangered	G3T2	S2	
Great Valley Mixed Riparian Forest *Great Valley Mixed Riparian Forest*	CTT61420CA	None	None	G2	S2.2	
Greene's tuctoria *Tuctoria greenei*	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
hoary bat *Lasiurus cinereus*	AMACC05032	None	None	G3G4	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Hurd's metapogon robberfly *Metapogon hurdi*	IIDIP08010	None	None	G1G2	S1S2	
lesser saltscale *Atriplex minuscula*	PDCHE042M0	None	None	G2	S2	1B.1
loggerhead shrike *Lanius ludovicianus*	ABPBR01030	None	None	G4	S4	SSC
Madera leptosiphon *Leptosiphon serrulatus*	PDPLM09130	None	None	G3	S3	1B.2
molestan blister beetle *Lytta molesta*	IICOL4C030	None	None	G2	S2	
Morrison bumble bee *Bombus morrisoni*	IIHYM24460	None	None	G3	S1S2	
Northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S2S3	SSC
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
northwestern pond turtle *Actinemys marmorata*	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S3	
San Joaquin Valley Orcutt grass *Orcuttia inaequalis*	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S4	
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	
Valley Sacaton Grassland *Valley Sacaton Grassland*	CTT42120CA	None	None	G1	S1.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp *Lepidurus packardi*	ICBRA10010	Endangered	None	G3	S3	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G4G5T4	S3S4	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
western spadefoot *Spea hammondii*	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Winter's sunflower *Helianthus winteri*	PDAST4N260	None	None	G2?	S2?	1B.2

Record Count: 43

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
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In Reply Refer To: 08/21/2024 15:02:41 UTC
Project Code: 2024-0133252
Project Name: Kings Estate V

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2024-0133252
Project Name: Kings Estate V
Project Type: Residential Construction
Project Description: The Kings Estate V Project (project) is proposed to annex four parcels into the City of Kingsburg and build residential housing on three of the parcels. The project site (site) is approximately 42.5 acres and includes three parcels, approximately 33.27 acres in size (Assessor's Parcel Number (APN) 393-121-37, -42, & -43) where West Star Construction Company, Inc. would build residential housing, and a fourth parcel, APN 393-121-46 (9.25 acres in size), however this parcel has not been proposed for development at this time. The parcels that would be developed have historically been used for agricultural use. Currently the site contains one single family residence that would be demolished as a part of the project. The project would involve constructing 97 single family residential lots, an approximately 0.99-acre park, and an approximately 1.34-acre stormwater basin that would connect to an existing basin immediately south of the site and serve the residential project.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.5374058,-119.55015050213674,14z

Counties: Fresno County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Fresno Kangaroo Rat *Dipodomys nitratoides exilis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5150	Endangered
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot *Spea hammondii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Shaylea Stark
Address: 455 W Fir Ave
City: Clovis
State: CA
Zip: 93612
Email sstark@ppeng.com
Phone: 5594492700

Appendix C: Cultural Resources

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Kyler Dill
Provost & Pritchard Consulting Group
3387 Bodero Lane
Chico, CA 95973

Record Search 24-367

Date: August 20, 2024

Re: City of Kingsburg – Kings Estates V Project

County: Fresno

Map(s): Selma 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there have been no previous cultural resource studies completed within the project area or within the one-half mile radius.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area, and it is unknown if any exist there. There is one recorded resource within the one-half mile radius, P-10-005812, an historic era canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project consists of construction of 97 single family residences, a park, a basin, and new roadways. Further, we understand portions of the project area are vacant, potions are used for agriculture, and one single family residence of unknown age is present. Please note that farming does not constitute previous development, as it does not destroy cultural resources, but merely moves them around within the plow zone. Because a cultural resources study has not been previously conducted on this property, it is unknown if any cultural resources exist there. Therefore, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. Additionally, according to our files, the existing building has never been recorded or evaluated for historical significance. If this structure is more than 45 years old, prior to alteration or demolition, we recommend a qualified, professional consultants record and evaluate it for historical significance. A referral list is available at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By: 

Celeste M. Thomson, Coordinator **Date**: August 20, 2024

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Appendix D: Vehicle Miles Traveled Memo

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

400 E. Main Street, Suite 300
Visalia, CA 93291-6337
Tel: (559) 636-1166
Fax: (559) 636-1177
www.provostandpritchard.com

Memorandum

To:	Holly Owen, Community Development Director, City of Kingsburg
From:	Jarred Olsen, Senior Planner
Subject:	Vehicle Miles Traveled Analysis of the Kings Estates V Subdivision
Date:	September 24, 2024

The Kings Estates V Subdivision, located immediately north of the city limits of Kingsburg on Assessor's Parcel Numbers 393-121-37, -42, and -43, proposes to subdivide 33.27-acres into 97 lots for the eventual development of 97 dwelling units, at a density of 2.92 dwelling units per acre. For purposes of this analysis, we include the two (2) dwelling units that are existing and/or proposed to be demolished. To this end, the analysis below assumes there are 95 additional dwelling units proposed.

Background

In December 2018, modifications to the California Environmental Quality Act (CEQA) Guidelines were adopted by the Governor's Office of Planning and Research (OPR), which requires all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate, enacted by the State Legislature through Senate Bill 743, took effect July 1, 2020. This analysis relies on the *Fresno County SB 743 Implementation Regional Guidelines*, prepared in January 2021. If the guidelines do not apply, the analysis will rely on information prepared by OPR as part of their December 2018 publication entitled *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory), which provides guidance for evaluating transportation impacts based on VMT.[1]

Project Screening

The Fresno COG guidelines provide details on appropriate "screening thresholds" that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed VMT analysis. Screening thresholds include:

1. Residential and office projects within a Transit Priority Area
2. Locally serving retail projects up to 50,000 square feet
3. Residential, office, or mixed-use projects within low-VMT generating areas
4. 100 percent affordable housing projects
5. Projects that generate fewer than 500 daily trips
6. Public service facilities

A land use project need only meet one of the above screening thresholds to result in a less than significant impact.

[1] (Governor's Office of Planning and Research (OPR) December 2018)

Transit Priority Area Screening

Transit priority areas are defined as “an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program.”

A Major transit stop means: “a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service of 15 minutes or less during the morning and afternoon peak commute periods.” A high-quality transit area or corridor is a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

No transit line in the City of Kingsburg meets the above criteria.

Transit Priority Area screening threshold is not met.

Retail Screening

As the Project is not a retail use, this screening is not applicable.

Retail screening threshold is not met.

Low VMT-generating Area Screening

Fresno COG identified the Low VMT-generating Area as illustrated on Attachment A. The Project is not located within the Low VMT-generating Area.

Low VMT-generating Area screening threshold not met.

Affordable Housing Screening

The Technical Advisory asserts that “a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. Evidence supports a presumption of less than significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations. Lead agencies may develop their own presumption of less than significant impact for residential projects (or residential portions of mixed-use projects) containing a particular amount of affordable housing, based on local circumstances and evidence.”

The Project would not meet Affordable Housing screening as the Project does not provide 100 percent affordable housing in an infill area.

Affordable Housing screening threshold is not met.

Trip Generation Screening

The Project proposes to construct 95 additional dwelling units. Per trip generation rates taken from *Trip Generation, 11th Edition – Institute of Traffic Engineers (ITE)*, the Project is expected to generate 884 net average daily trips. This trip generation exceeds the 500-daily-trip threshold.

Trip Generation screening threshold is not met.

Public Services Screening

Fresno COG identifies that the development of institutional/government and public service uses that support community health, safety and welfare may be screened out as these uses are already part of the community and, as a public service, the VMT is accounted for in the existing regional average. The Project does not propose to construct a public services facility.

Public Services screening threshold is not met.

Conclusion

The proposed Project does not meet any of the aforementioned screening criteria. Therefore, a more thorough VMT analysis is required.

VMT Analysis

As this Project does not seek to amend the General Plan, we reviewed the Program EIR for the Fresno COG 2022 Regional Transportation Plan/Sustainable Communities Strategy ("RTP/SCS"). This EIR reviewed the vehicle miles traveled impacts of its member jurisdictions as it relates to SB 743. This EIR found that the impacts to VMT were a significant and unavoidable impact, in which a Statement of Overriding Considerations was adopted, while also identifying all feasible mitigation measures. These measures are analyzed below for applicability:

Mitigation Measure	**Analysis**
TT 3.17.2-1 Measures intended to reduce VMT are part of the RTP/SCS. These include increasing rideshare and work-at-home opportunities to reduce demand on the transportation system, investments in non-motorized transportation, maximizing the benefits of the land use/transportation connection through increased densities and mixed uses, other Travel Demand Management measures described in the RTP and in local agency General Plans.	This measure is technically not a mitigation measure and discusses in detail, as described below, what these measures include.
TT 3.17.2-2 Fresno COG will continue to secure funding programs considering a project's ability to enhance complete streets objectives where it is feasible.	**Not applicable.** This measure is addressed to FresnoCOG.
TT 3.17.2-3 Beyond the currently financially and institutionally feasible measures included in the 2022 RTP/SCS, Fresno COG will identify further reduction in VMT, and fuel consumption that could be obtained through land-use strategies, additional car-sharing programs, additional vanpools, and additional bicycle/pedestrian programs.	**Not applicable.** This measure is addressed to FresnoCOG.
TT 3.17.2-4 Transportation Planning: Fresno COG will assist local jurisdictions to encourage new developments to incorporate both local and regional transit measures into the project design that promote the use of alternative modes of transportation.	**Not applicable.** This measure is addressed to FresnoCOG.

Mitigation Measure	**Analysis**
TT 3.17.2-5 Local jurisdictions are encouraged to promote ride sharing programs e.g., by designating a certain percentage of parking spaces for high-occupancy vehicles, providing larger parking spaces to accommodate vans used for ridesharing, and designating adequate passenger loading and unloading and waiting areas.	**Not applicable.** Ridesharing programs are more appropriate for commercial land uses.
TT 3.17.2-6 Local jurisdictions are encouraged to support the use of public transit systems by enhancing safety and cleanliness on vehicles and in and around stations, providing shuttle service to public transit, offering public transit incentives, and providing public education and publicity about public transportation services.	**Not applicable.** The City of Kingsburg does not provide transit services.
TT 3.17.2-7 Local jurisdictions are encouraged to support bicycling and walking by incorporating bicycle lanes into street systems in regional transportation plans, new subdivisions, and large developments, creating bicycle lanes and walking paths directed to the location of schools and other logical points of destination and provide adequate bicycle parking, and encouraging commercial projects to include facilities on-site to encourage employees to bicycle or walk to work.	**Consistent.** The Project proposes to develop along a major street. Construction of the major street to its fair share of ultimate right-of-way will include all applicable bicycle lanes and other active transportation elements, in addition to walking paths to other parts of the City.
TT 3.17.2-8 Transit agencies are encouraged to support bicycling to transit facilities by providing additional bicycle parking, locker facilities, and bike lane access to transit facilities when feasible.	**Not applicable.** The City of Kingsburg nor the Developer is a transit agency.
TT 3.17.2-9 Project sponsors are encouraged to build or fund a major transit stop within or near the development.	**Not applicable.** The City of Kingsburg does not possess 15-minute transit service. Therefore, extending such service would be prohibitively expensive and would exceed the development's fair share of transportation impacts.
TT 3.17.2-10 Local jurisdictions and transit agencies are encouraged to provide public transit incentives such as free or low-cost monthly transit passes to employees, or free ride areas to residents and customers**.**	**Not applicable.** The City is not proposing to develop the residential subdivision.
TT 3.17.2-11 Local jurisdictions and project sponsors are encouraged to incorporate bicycle lanes, routes and facilities into street systems, new subdivisions, and large developments.	**Consistent.** The Project proposes to develop along a major street. Construction of the major street to its fair share of ultimate right-of-way will include all applicable bicycle lanes and other active transportation elements, in addition to walking paths to other parts of the City.

Mitigation Measure	**Analysis**
TT 3.17.2-12 Local jurisdictions are encouraged to require amenities for non-motorized transportation, such as secure and convenient bicycle parking.	**Consistent.** Residences would be constructed that could securely store bicycles.
TT 3.17.2-13 Local jurisdictions are encouraged to ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation.	**Consistent.** Development of the Project would continue to extend transportation infrastructure, including sidewalks and bicycle lanes as applicable, to further promote non-motorized transportation.
TT 3.17.2-14 Local jurisdictions are encouraged to connect parks and open space through shared pedestrian/bike paths and trails to encourage walking and bicycling.	**Consistent.** Construction of the Project would extend pedestrian and bicycle paths which would eventually connect to parks and open space.
TT 3.17.2-15 Local jurisdictions are encouraged to create bicycle lanes and walking paths directed to the location of schools, parks, and other destination points.	**Consistent.** Construction of the Project would extend pedestrian and bicycle paths which would eventually connect to parks and open space.
TT 3.17.2-16 Local jurisdictions are encouraged to work with the school districts to improve pedestrian and bike access to schools and to restore or expand school bus service using lower-emitting vehicles.	**Not applicable.** The Project proponent is neither the City nor a school district.
TT 3.17.2-17 Local jurisdictions and transit agencies are encouraged to provide information on alternative transportation options for consumers, residents, tenants, and employees to reduce transportation-related emissions.	**Not applicable.** The Project proponent is neither the City nor a transit agency.
TT 3.17.2-18 Local jurisdictions are encouraged to educate consumers, residents, tenants, and the public about options for reducing motor vehicle-related greenhouse gas emissions. Include information on trip reduction; trip linking; vehicle performance and efficiency (e.g., keeping tires inflated); and low or zero-emission vehicles.	**Not applicable.** This information is commonly conveyed by the San Joaquin Valley Air Pollution Control District.
TT 3.17.2-19 Project Selection: Local jurisdictions are encouraged to give priority to transportation projects that would contribute to a reduction in vehicle miles traveled per capita, while maintaining economic vitality and sustainability.	**Not applicable.** The Project does not propose to construct a major transportation infrastructure project.
TT 3.17.2-20 System Interconnectivity: Local jurisdictions are encouraged to create an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling, and walking, by incorporating the following:	**Consistent.** The City of Kingsburg provides existing and planned bicycle lanes that connect most of the City to parks, schools, Downtown, and major employment centers. Transit services are provided by a separate transit agency.

Mitigation Measure	**Analysis**
• Provide transportation centers that are multi-modal to allow transportation modes to intersect; • Provide adequate and affordable public transportation choices, including expanded bus routes and service, as well as other transit choices such as shuttles; • To the extent feasible, extend service and hours of operation to underserved arterials and population centers or destinations such as colleges; • Focus transit resources on high-volume corridors and high-boarding destinations such as colleges, employment centers and regional destinations; • Coordinate schedules and routes across service lines with neighboring transit authorities; • Support programs to provide "station cars" for short trips to and from transit nodes (e.g., neighborhood electric vehicles); • Employ transit-preferential measures, such as signal priority and bypass lanes. Where compatible with adjacent land use designations, right-of-way acquisition or parking removal may occur to accommodate transit-preferential measures or improve access to transit. The use of access management should be considered where needed to reduce conflicts between transit vehicles and other vehicles; • Provide safe and convenient access for pedestrians and bicyclists to, across, and along major transit priority streets; • Use park-and-ride facilities to access transit stations only at ends of regional transitways or where adequate feeder bus service is not feasible.	
TT 3.17.2-21 Transit System Infrastructure: Local jurisdictions are encouraged to upgrade and maintain transit system infrastructure to enhance public use, including: • Provide transit stops and bus lanes that are safe, convenient, clean, and efficient;	**Not applicable.** The Project proponent is not a transit agency.

Mitigation Measure	**Analysis**
• Provide transit stops that have clearly marked street-level designation, and are accessible; • Provide transit stops that are safe, sheltered, benches are clean, and lighting is adequate; • Place transit stations along transit corridors within mixed-use or transit-oriented development areas at intervals of three to four blocks, or no less than one-half mile	
TT 3.17.2-22 Customer Service: Transit agencies are encouraged to enhance customer service and system ease-of-use, including: • Develop a Regional Pass system to reduce the number of different passes and tickets required of system users; • Implement "Smart Bus" technology, using GPS and electronic displays at transit stops to provide customers with "real-time" arrival and departure time information (and to allow the system operator to respond more quickly and effectively to disruptions in service); • Investigate the feasibility of an on-line trip-planning program. • Before funding transportation improvements that increase roadway capacity and VMT, evaluate the feasibility and effectiveness of funding projects that support alternative modes of transportation and reduce VMT, including transit, and bicycle and pedestrian access.	**Not applicable.** The Project proponent is not a transit agency.
TT 3.17.2-23 System Monitoring: Local jurisdictions are encouraged to monitor traffic and congestion to determine when and where new transportation facilities are needed in order to increase access and efficiency.	**Not applicable.** The City of Kingsburg already conducts this activity.
TT 3.17.2-24 Arterial Traffic Management: Local jurisdictions are encouraged to modify arterial roadways to allow more efficient bus operation, including bus lanes and signal priority/preemption where necessary.	**Not applicable.** While the adjacent major street, Mendocino Avenue, is a designated Arterial, existing transit service does not utilize this street.
TT 3.17.2-25 HOV Lanes: Local jurisdictions are encouraged to support the construction of high-occupancy vehicle (HOV) lanes or similar mechanisms whenever necessary to relieve congestion and reduce emissions.	**Not applicable.** Kingsburg lacks the severity of congestion that would warrant HOV lanes.

Mitigation Measure	**Analysis**
TT 3.17.2-26 Ride-Share Programs: Fresno COG will, and local jurisdictions are encouraged to promote ride sharing programs, including: • Designate a certain percentage of parking spaces for ride-sharing vehicles; • Designate adequate passenger loading, unloading, and waiting areas for ride-sharing vehicles; • Provide a web site or message board for coordinating shared rides; • Encourage private, for-profit community car-sharing, including parking spaces for car share vehicles at convenient locations accessible by public transit; • Hire or designate a rideshare coordinator to develop and implement ridesharing programs.	**Consistent.** Fresno COG currently subsidizes the CalVans program, of which all Kingsburg residents are eligible to participate.
TT 3.17.2-27 Employer-based Trip Reduction: Local jurisdictions are encouraged to support voluntary, employer-based trip reduction programs, including: • Provide assistance to regional and local ridesharing organizations; • Advocate for legislation to maintain and expand incentives for employer ridesharing programs; • Require the development of Transportation Management Associations for large employers and commercial/ industrial complexes; • Provide public recognition of effective programs through awards, top ten lists, and other mechanisms.	**Not applicable.** The Project proponent does not propose employee-based uses.
TT 3.17.2-28 Ride Home Programs: Local jurisdictions are encouraged to implement a "guaranteed ride home" program for those who commute by public transit, ride-sharing, or other modes of transportation, and encourage employers to subscribe to or support the program.	**Not applicable.** The Project proponent does not propose employee-based uses.
TT 3.17.2-29 Local Area Shuttles: Transit agencies are encouraged to utilize shuttles to serve neighborhoods, employment centers and major destinations.	**Not applicable.** The Project proponent does not propose employee-based uses.
TT 3.17.2-30 Local jurisdictions and transit agencies are encouraged to create a free or low-cost local area shuttle system that includes a fixed route to popular tourist	**Not applicable.** The Project proponent is not the City of Kingsburg or a transit agency.

Mitigation Measure	**Analysis**
destinations or shopping and business centers.	
TT 3.17.2-31 Local jurisdictions are encouraged to work with existing shuttle service providers to coordinate their services.	**Not applicable.** The City of Kingsburg does not provide transit services that would conflict or otherwise would be benefit from such coordination.
TT 3.17.2-32 Low- and No-Travel Employment Opportunities: Local jurisdictions are encouraged to facilitate employment opportunities that minimize the need for private vehicle trips, including: • Amend zoning ordinances and the Development Code to include live/work sites and satellite work centers in appropriate locations; • Encourage telecommuting options with new and existing employers, through project review and incentives, as appropriate.	**Not applicable.** The Project site is currently zoned Residential and no proposal for live/work is proposed. Despite this, home-based employment is permitted in the proposed zone district.
TT 3.17.2-33 Local jurisdictions are encouraged to support bicycle use as a mode of transportation by enhancing infrastructure to accommodate bicycles and riders and providing incentives.	**Consistent.** The City promotes bicycle use by maintaining and constructing bicycle lanes along popular destination routes within the City.
TT 3.17.2-34 Development Standards for Bicycles: Local jurisdictions are encouraged to establish standards for new development and redevelopment projects to support bicycle use, including: • Amending the Development Code to include standards for safe pedestrian and bicyclist accommodations, by incorporating the following: • "Complete Streets" policies that foster equal access by all users in the roadway design, wherever feasible; • Bicycle and pedestrian access internally and in connection to other areas through easements; • Safe access to public transportation and other non-motorized uses through construction of dedicated paths; • Safe road crossings at major intersections, especially for school children and seniors; • Adequate, convenient, and secure bike parking at public and private facilities and destinations in all urban areas;	**Consistent.** The Project proposes to construct local streets with street-facing residences, which would promote the use of bicycles. Additionally, the adjacent roadway is planned for Class II bikeways, which would connect to Downtown, parks, and schools.

Mitigation Measure	**Analysis**
• Street standards will include provisions for bicycle parking within the public right of way.	
TT 3.17.2-35 Local jurisdictions are encouraged to incorporate bicycle facilities, as appropriate in the new land use, including: • Construction of weatherproof bicycle facilities where feasible, and at a minimum, bicycle racks or covered, secure parking near the building entrances; • Provision and maintenance of changing rooms, lockers, and showers at large employers or employment centers. • Prohibit projects that impede bicycle and pedestrian access, such as large parking areas that cannot be safely crossed by non-motorized vehicles, and developments that block through access on existing or potential bicycle and pedestrian routes; • Encourage the development of bicycle stations at intermodal hubs, with attended or "valet" bicycle parking, and other amenities such as bicycle rental and repair, and changing areas with lockers and showers; • Conduct a connectivity analysis of the existing bikeway network to identify gaps and prioritize bikeway development where gaps exist.	**Consistent.** The Project will be required to construct Class II bicycle lanes and will connect to existing adjacent subdivisions.
TT 3.17.2-36 Bicycle and Pedestrian Trails: Local jurisdictions are encouraged to establish a network of multi-use trails to facilitate safe and direct off-street bicycle and pedestrian travel and will provide bike racks along these trails at secure, lighted locations.	**Consistent.** The Project will be required to construct Class II bicycle lanes.
TT 3.17.2-37 Bicycle Safety Program: Local jurisdictions are encouraged to develop and implement a bicycle safety educational program to teach drivers and riders the laws, riding protocols, routes, safety tips, and emergency maneuvers.	**Not applicable.** The Project proponent is not the City of Kingsburg.
TT 3.17.2-38 Bicycle and Pedestrian Project Funding: Local jurisdictions are encouraged to pursue and provide enhanced funding for bicycle and pedestrian facilities and access projects, including, as appropriate:	**Not applicable.** The Project proponent is not the City of Kingsburg. Despite this, the City of Kingsburg does pursue funding for bicycle and pedestrian projects.

Mitigation Measure	**Analysis**
• Apply for regional, State, and federal grants for bicycle and pedestrian infrastructure projects; • Establish development exactions and impact fees to fund bicycle and pedestrian facilities; • Use existing revenues, such as State gas tax subventions, sales tax funds, and general fund monies for projects to enhance bicycle use and walking for transportation.	
TT 3.17.2-39 Bicycle Parking: Local jurisdictions are encouraged to adopt bicycle parking standards that ensure bicycle parking sufficient to accommodate 5 to 10 percent of projected use at all public and commercial facilities, and at a rate of at least one per residential unit in multiple-family developments.	**Not applicable.** The Project is not a commercial or multiple-family development.
TT 3.17.2-40 Local jurisdictions are encouraged to implement measures to reduce employee vehicle trips and to mitigate emissions impacts from municipal travel.	**Not applicable.** The Project does not propose municipal vehicle-generating uses.
TT 3.17.2-41 Pedestrian and Bicycle Promotion: Local jurisdictions are encouraged to work with local community groups and downtown business associations to organize and publicize walking tours and bicycle events, and to encourage pedestrian and bicycle modes of transportation.	**Not applicable.** While the City does encourage pedestrian modes of transportation as described above, the City is not the Project proponent.
TT 3.17.2-42 Trip Reduction Program: Local jurisdictions are encouraged to implement a program to reduce vehicle trips by employees, including: • Providing incentives and infrastructure for vanpooling and carpooling, such as pool vehicles, preferred parking, and a website or bulletin board to facilitate ridesharing; • Providing subsidized passes for mass transit; • Offering compressed work hours, off-peak work hours, and telecommuting, where appropriate; • Offer a guaranteed ride home for employees who use alternative modes of transportation to commute.	**Not applicable.** The Project does not propose employment uses.
TT 3.17.2-43 Bicycle Transportation Support: Local jurisdictions are encouraged to promote and support the use of bicycles as transportation, including:	**Consistent.** The City of Kingsburg provides bicycle facilities throughout the City, and the Project proponent is required to construct

Mitigation Measure	**Analysis**
• Providing bicycle stations with secure, covered parking, changing areas with storage lockers and showers, as well as a central facility where minor repairs can be made; • Providing bicycles, including electric bikes, for employees to use for short trips during business hours; • Implementing a police-on-bicycles program; • Providing a bicycle safety program, and information about safe routes to work.	Class II bicycle facilities along its Project frontage.
TT 3.17.2-44 Transit Access to Municipal Facilities: Local jurisdiction and agency facilities are encouraged to be located on major transit corridors, unless their use is plainly incompatible with other uses located along major transit corridors.	**Consistent.** Existing transit service stops in Downtown at Marion and Lewis.
TT 3.17.2-45 Local jurisdictions are encouraged to implement Intelligent Transportation Systems improvements, where feasible, that will: • Use technology to improve traffic signal timing in order to optimize traffic flow and transit service • Involve new equipment to improve on-time transit performance and provide real-time transit information at stops and stations.	**Consistent.** The City uses traffic signal timing to optimize traffic flow and consequently transit service.

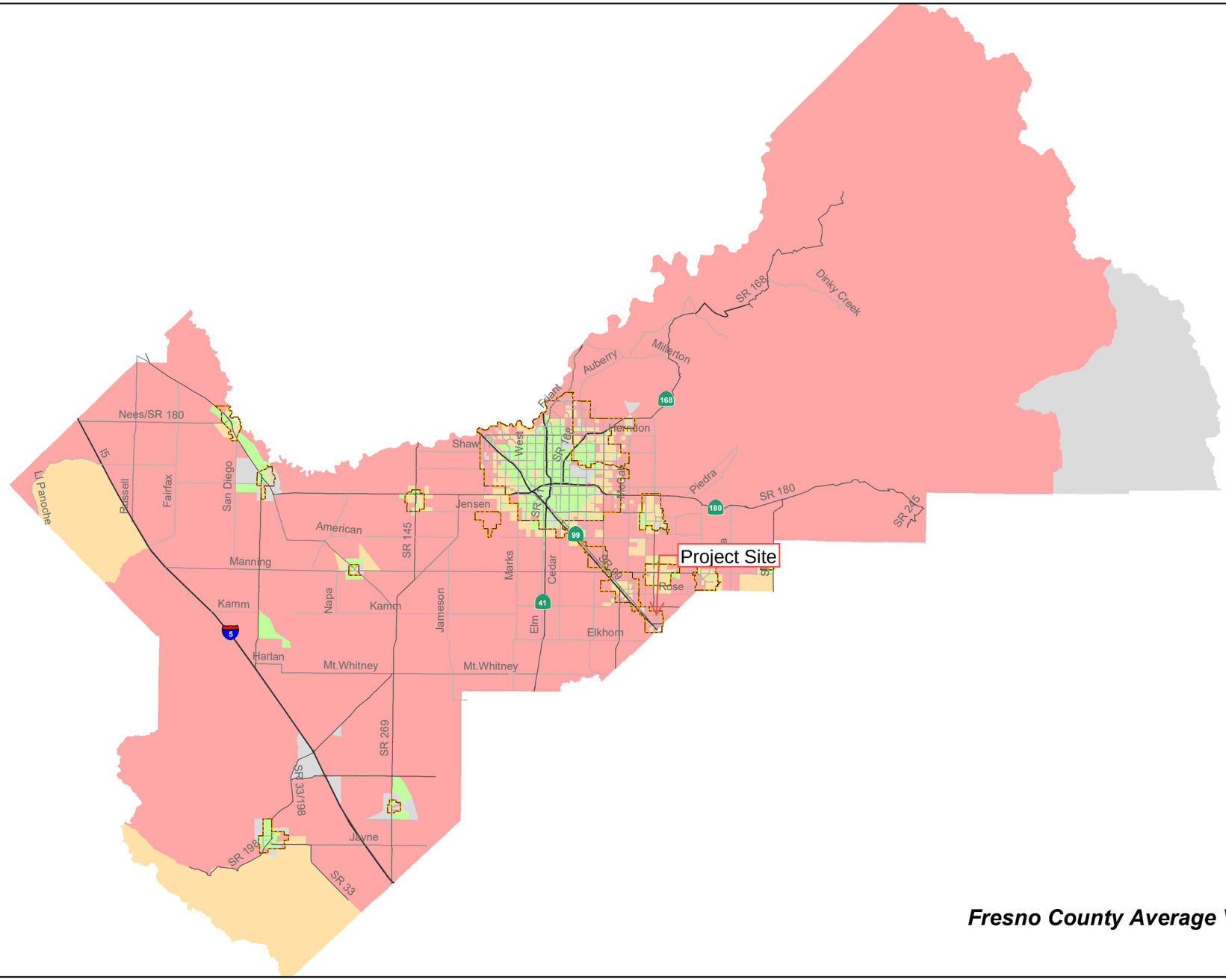
In summary, the Project would not conflict and incorporates by design or by City requirement all applicable measures from the Fresno COG 2022 Regional Transportation Plan/Sustainable Communities Strategy Program EIR.

VMT Conclusion

While no Fresno COG thresholds were met, the project is considered to be consistent with both the Fresno COG 2022 Regional Transportation Plan/Sustainable Communities Strategy and the Program EIR adopted with it. As this Project would comply with all applicable mitigation measures, as they are incorporated by City requirement, this Project's impact to VMT would have a less than significant impact that was already analyzed in the Program EIR. If you have any questions or need further information, please do not hesitate to contact me at jolsen@ppeng.com.

Sincerely,

Jarred Olsen
Senior Planner



Fresno County Average VMT per Capita: 16.1
Threshold: 13%

LSA

Cities Including Sphere of Influence

VMT per Capita

- No Population
- Less than 14.0
- 14.0 - 18.2
- Greater than 18.2

FIGURE 7

Fresno County SB 743 Implementation Regional Guidelines

VMT per Capita Screening Map for Fresno County

SOURCE: Fresno COG Activity Based Travel Demand Model (2019)

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