Initial Study and Mitigated Negative Declaration for KCOK 5/9 Subdivision Map

April 2022

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City of Tulare
411 East Kern Avenue
Tulare, CA 93274

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411 East Kern Avenue
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SECTION 1
CEQA Review Process

Project Title: KCOK 5/9 Subdivision Map

1.1 California Environmental Quality Act Guidelines

Section 15063 of the California Environmental Quality Act (CEQA) Guidelines requires that the Lead Agency prepare an Initial Study to determine whether a discretionary project will have a significant effect on the environment. All phases of the project planning, implementation, and operation must be considered in the Initial Study. The purposes of an Initial Study, as listed under Section 15063(c) of the CEQA Guidelines, include:

(1) Provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or negative declaration;
(2) Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;
(3) Assist the preparation of an EIR, if one is required, by:
    (a) Focusing the EIR on the effects determined to be significant,
    (b) Identifying the effects determined not to be significant,
    (c) Explaining the reasons for determining that potentially significant effects would not be significant, and
    (d) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
(4) Facilitate environmental assessment early in the design of a project;
(5) Provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment
(6) Eliminate unnecessary EIRs;
(7) Determine whether a previously prepared EIR could be used with the project.

1.2 Initial Study

The Initial Study provided herein covers the potential environmental effects of the construction and operation of 88 low density residential dwelling units on approximately 25.87 gross acres. The proposed project would also rezone the project site from R-1-6 and R-1-20 to R-1-4 and R-1-5, a General Plan amendment from Rural Residential and Low Density Residential to Single Family Residential and Small Lot Residential, and a Conditional Use Permit to establish R-1-4 zoning. The City of Tulare will act as the Lead Agency for processing the Initial Study/Mitigated Negative Declaration pursuant to the CEQA Guidelines.

1.3 Environmental Checklist

The Lead Agency may use the CEQA Environmental Checklist Form [CEQA Guidelines, Section 15063(d)(3) and (f)] in preparation of an Initial Study to provide information for determination if there are significant effects of the project on the environment. A copy of the completed Environmental Checklist is set forth in **Section Three**.

1.4 Notice of Intent to Adopt a Negative Declaration

The Lead Agency shall provide a Notice of Intent to Adopt a Negative Declaration (CEQA Guidelines, Section 15072) to the public, responsible agencies, trustee agencies and the County Clerk within which the project is located, sufficiently prior to adoption by the Lead Agency of the Negative Declaration to allow the public and agencies the review period. The public review period (CEQA Guidelines, Section 15105) shall not be less than 30 days when the Initial Study/Negative Declaration is submitted to the State Clearinghouse unless a shorter period, not less than 20 days, is approved by the State Clearinghouse.

Prior to approving the project, the Lead Agency shall consider the proposed Negative Declaration together with any comments received during the public review process, and shall adopt the proposed Negative Declaration only if it finds on the basis of the whole record before it, that there is no substantial evidence that the project will have a significant effect on the environment and that the Negative Declaration reflects the Lead Agency's independent judgment and analysis.

The written and oral comments received during the public review period will be considered by The City of Tulare prior to adopting the Negative Declaration. Regardless of the type of CEQA document that must be prepared, the overall purpose of the CEQA process is to:

1) Assure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns;
2) Provide for full disclosure of the project's environmental effects to the public, the agency decision-makers who will approve or deny the project, and the responsible trustee agencies charged with managing resources (e.g. wildlife, air quality) that may be affected by the project; and
3) Provide a forum for public participation in the decision-making process pertaining to potential environmental effects.

According to Section 15070(a) a public agency shall prepare or have prepared a proposed negative declaration for a project subject to CEQA when:

> ***The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. Less than significant impacts with mitigation measures have been identified.***

The Environmental Checklist Discussion contained in Section Three of this document has determined that the environmental impacts of the project are less than significant with mitigation measures and that a Mitigated Negative Declaration is adequate for adoption by the Lead Agency.

1.5 Negative Declaration or Mitigated Negative Declaration

The Lead Agency shall prepare or have prepared a proposed Negative Declaration or Mitigated Negative Declaration (CEQA Guidelines Section 15070) for a project subject to CEQA when the Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. The proposed Negative Declaration or Mitigated Negative Declaration circulated for public review shall include the following:

(a) A brief description of the project, including a commonly used name for the project.
(b) The location of the project, preferably shown on a map.
(c) A proposed finding that the project will not have a significant effect on the environment.
(d) An attached copy of the Initial Study documenting reasons to support the finding.
(e) Mitigation measures, if any.

1.6 Intended Uses of Initial Study/Negative Declaration documents

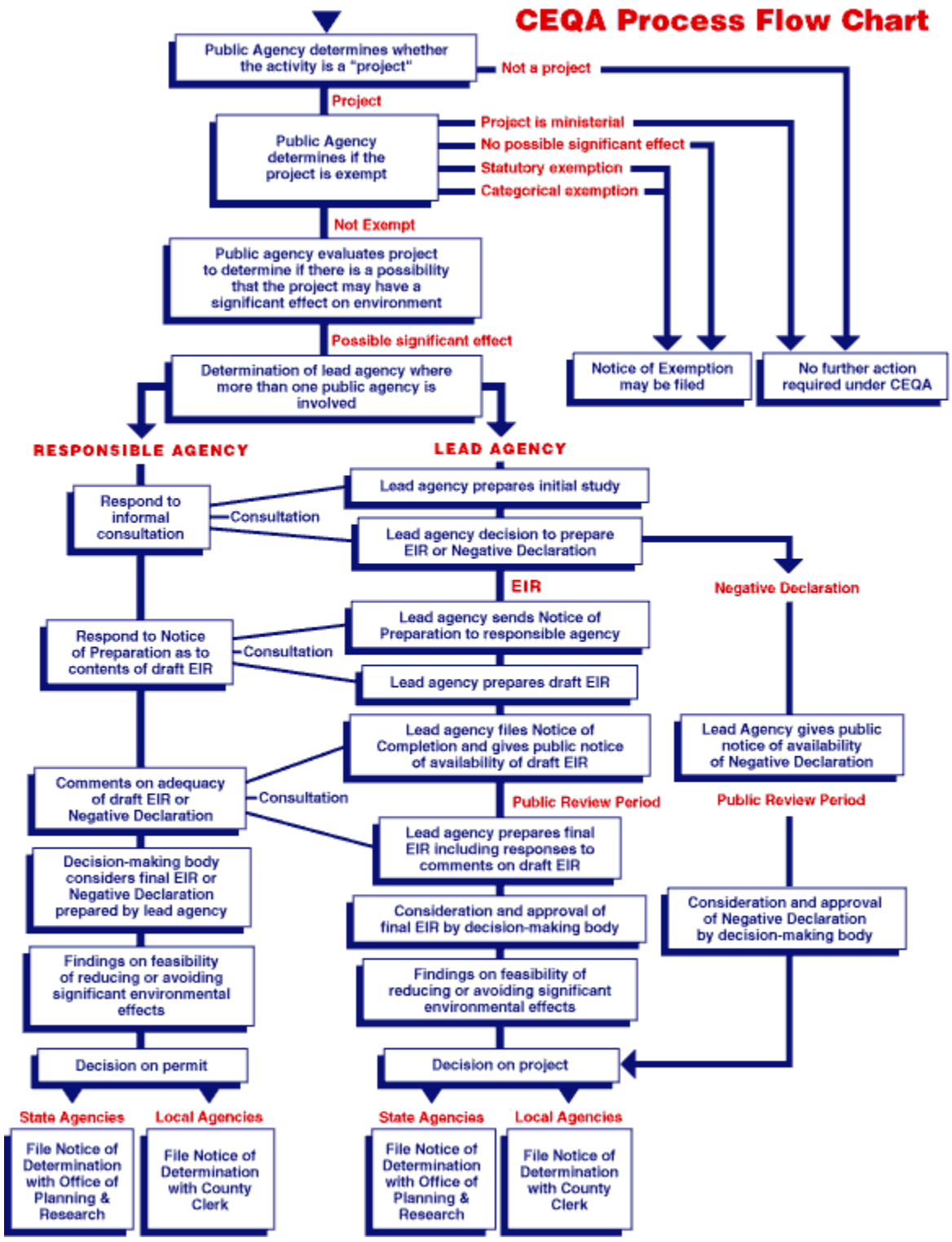
The Initial Study/Negative Declaration document is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed project. The environmental review process has been established to enable the public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency must balance any potential environmental effects against other public objectives, including economic and social goals. The City of Tulare, as Lead Agency, will make a determination, based on the environmental review for the Environmental Study, Initial Study and comments from the general public, if there are less than significant impacts from the proposed project and the requirements of CEQA can be met by adoption of a Mitigated Negative Declaration.

1.7 Notice of Determination (NOD)

The Lead Agency shall file a Notice of Determination within five working days after deciding to approve the project. The Notice of Determination (CEQA Guidelines, Section 15075) shall include the following:

(1) An identification of the project including the project title as identified on the proposed negative declaration, its location, and the State Clearinghouse identification number for the proposed negative declaration if the notice of determination is filed with the State Clearinghouse.
(2) A brief description of the project.
(3) The agency's name and the date on which the agency approved the project.
(4) The determination of the agency that the project will not have a significant effect on the environment.
(5) A statement that a negative declaration or a mitigated negative declaration was adopted pursuant to the provisions of CEQA.
(6) A statement indicating whether mitigation measures were made a condition of the approval of the project, and whether a mitigation monitoring plan/program was adopted.
(7) The address where a copy of the negative declaration or mitigated negative declaration may be examined.
(8) The identity of the person undertaking a project which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies or the identity of the person receiving a lease, permit, license, certificate, or other entitlement for use from one or more public agencies.

1.8 CEQA Process Flow Chart



Section 2

Project Description

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 2
Project Description

Project Title: KCOK 5/9 Subdivision Map

2.1 Project Background & Purpose

The proposed project site is within the City of Tulare. The proposed project involves the development of 88 single-family residential units. The Project includes a mix of typical lot sizes, which are summarized in Table 2-1.

Lot Dimensions	Lot Area	Number of Units
52’ x 90’	4,680 sf	30 units
50’ x 100’	5,000 sf	19 units
50’ x 140’	7,000 sf	26 units
65’ x 100’	6,500 sf	4 units
Misc.		9 units

Table 2-1. Typical Project lot sizes.

The project will require a rezone of the site from R-1-6 and R-1-20 to R-1-4 and R-1-5, a General Plan amendment from Rural Residential and Low Density Residential to Single Family Residential and Small Lot Residential, and a Conditional Use Permit to establish R-1-4 zoning.

The proposed project would result in on-site infrastructure improvements, including new local residential streets and new and relocated utilities. The proposed project would include ROW dedications and street improvements, including the build out of Seminole Avenue and frontage improvements on Morrison Street. Construction is proposed to begin in Spring 2023 and continue through Winter 2025. See Figure 3-2 for site layout.

2.2 Project Location

The proposed project site is located within the northeastern portion of the City of Tulare, on the northeast corner of Spyglass Street and Seminole Avenue. The project site is approximately 25.87 gross acres and is located on APN 172-010-047. The site is bordered by single family residential uses to the west, and agricultural land uses to the north, east and south.

2.3 Other Permits and Approvals

Other permits and approvals required for the KCOK 5/9 Tentative Subdivision Map Project are listed below. It should be noted that this list is not exhaustive and additional permits and approvals may also be required.

- *City of Tulare Tentative Subdivision Map*
- *City of Tulare Zone Amendment*
- *City of Tulare General Plan Amendment*
- *City of Tulare Conditional Use Permit*
- *City of Tulare Landscape and Maintenance District*
- *City of Tulare Building and Encroachment Permits*
- *San Joaquin Valley Air Pollution Control District (SJVAPCD)*. The proposed project is within the jurisdiction of the SJVAPCD and will be required to comply with Rule VIII, 3135, 4101, and 9510.
- *Central Valley Regional Water Quality Control Board, SWPPP*. The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater as a result of project construction

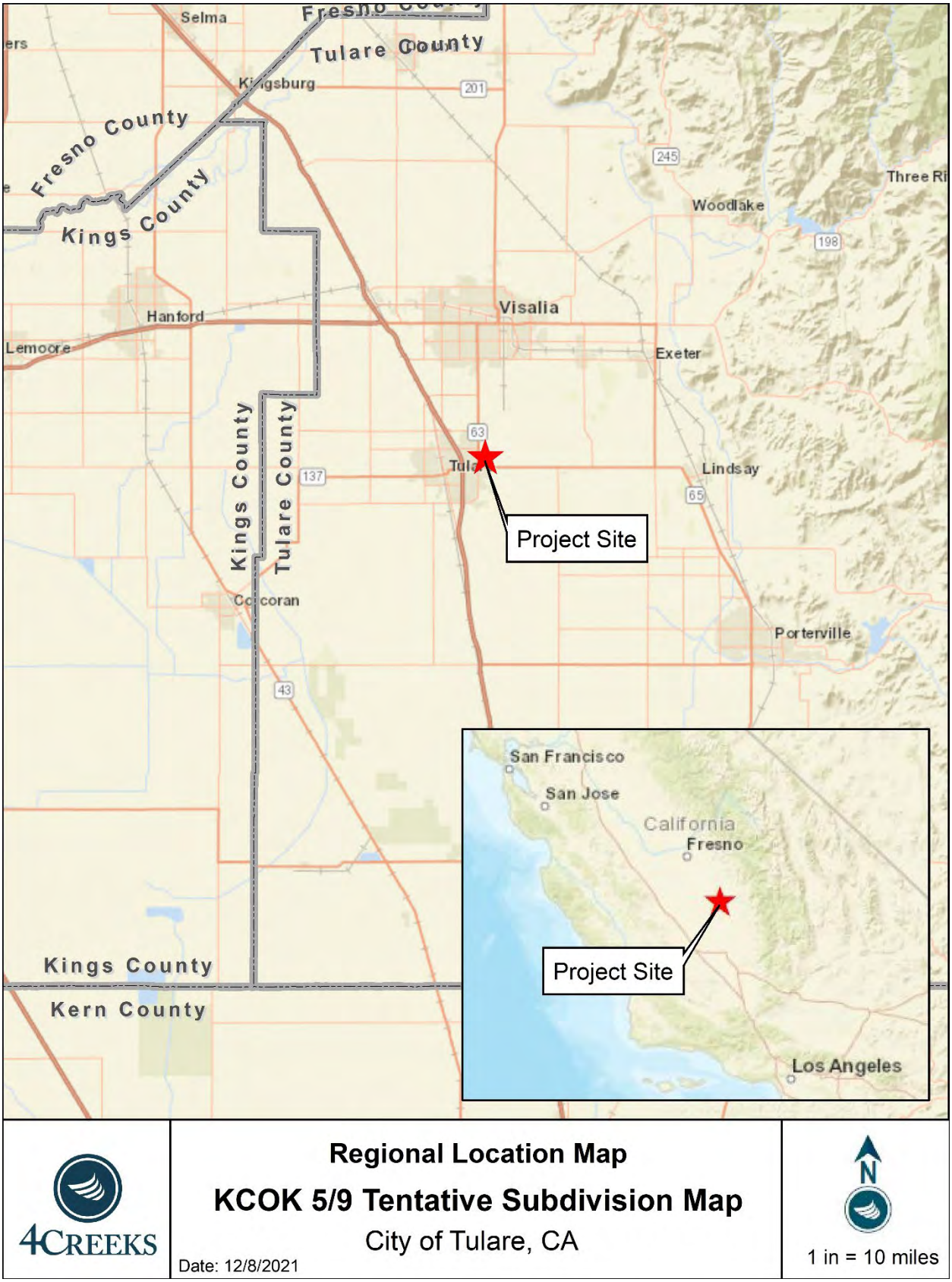


Figure 2-1. Regional Location Map

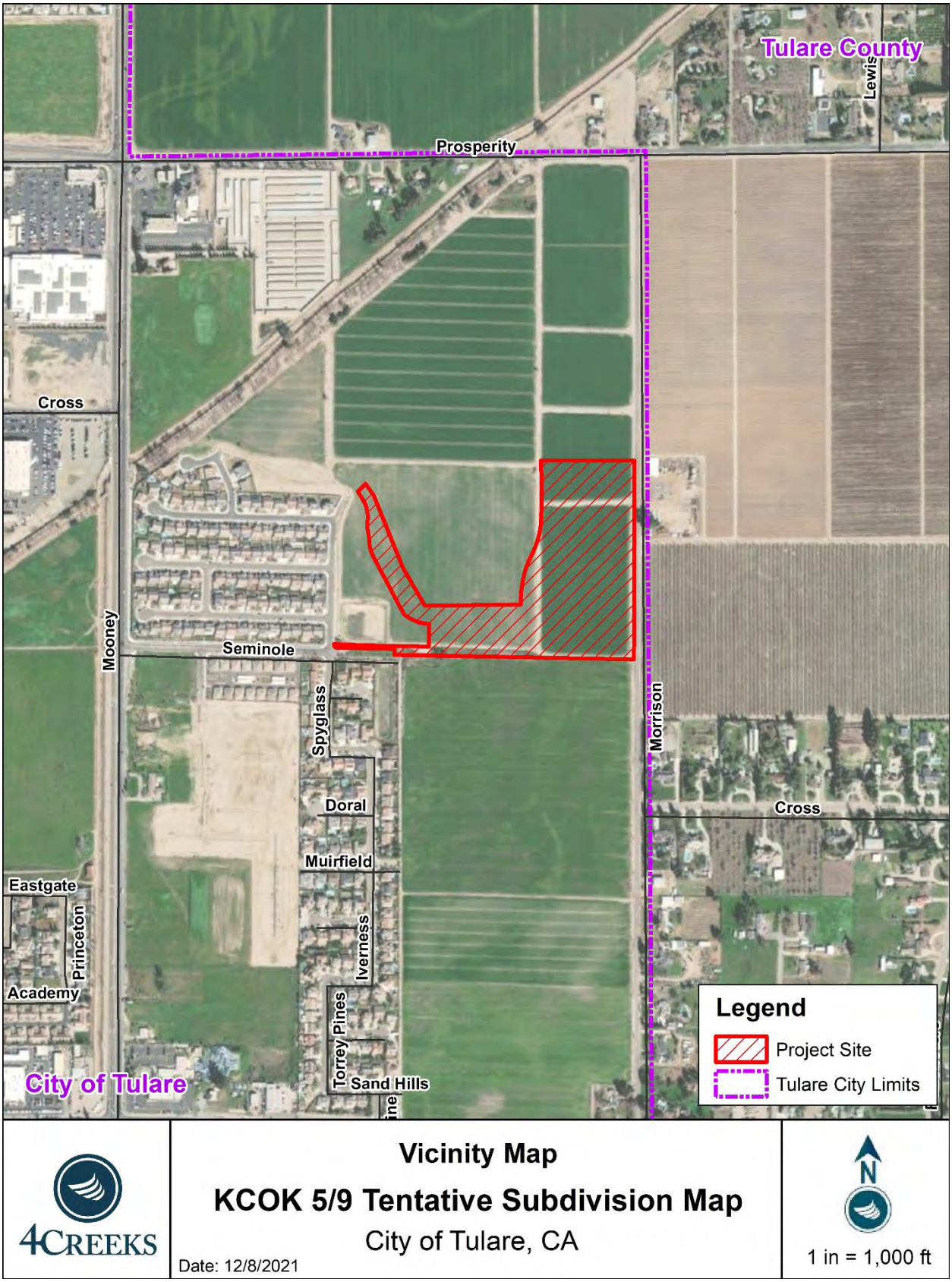


Figure 2-2. Vicinity Map.

Section 3

Evaluation of Environmental Impacts

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 3
Evaluation of Environmental Impacts

Project Title: KCOK 5/9 Subdivision Map

This document is the Initial Study/Mitigated Negative Declaration for the proposed construction and operation 88 low density single family residential dwelling units on approximately 25.87 gross acres. The proposed project would also rezone the project site from R-1-6 and R-1-20 to R-1-4 and R-1-5, a General Plan amendment from Rural Residential and Low Density Residential to Single Family Residential and Small Lot Residential, and a Conditional Use Permit to establish R-1-4 zoning. The project is located within City of Tulare city limits. The City of Tulare will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

3.1 PURPOSE

The purpose of this environmental document is to implement the California Environmental Quality Act (CEQA). Section 15002(a) of the CEQA Guidelines describes the basic purposes of CEQA as follows.

(1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify the ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.).

According to Section 15070(a), a Negative Declaration is appropriate if it is determined that:

(1) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment.

3.2 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1. **Project Title:** KCOK 5/9 Subdivision Map

2. **Lead Agency:** City of Tulare
411 East Kern Avenue
Tulare, CA 93274
(559) 684-4210

3. **Applicant:** D.R. Horton, Inc.
Contact Person: Corine Demetreos
419 W Murray Avenue
Visalia, CA 93291
(559) 636-3864

4. **Project Location:** The proposed project site is located within the northeastern portion of the City of Tulare, on the northeast corner of Spyglass Street and Seminole Avenue. The project site is approximately 25.87 gross acres and is located on APN 172-010-047. The site is bordered by single family residential uses to the west, and agricultural land uses to the north, east and south.

5. **General Plan Designation** Approximately 7 acres of the project site are designated Low Density Residential, and 18 acres are designated Rural Residential. The project requires a General Plan amendment and Conditional Use Permit to change the land use designation of the Low Density Residential of the project to Small Lot Residential, and a General Plan amendment to change the land use designation of the Rural Residential to Single Family Residential.

6. **Zoning Designation:** Approximately 7 acres of the project site are zoned R-1-6, and 18 acres are zoned R-1-20. The project requires rezoning the R-1-6 portion of the project site to R-1-4 and the R-1-20 portion of the project site to R-1-5.

7. **Project Description:** The proposed project site is within the City of Tulare. The proposed project involves the development of 88 low density single family residential dwelling units. The project will require re-zone of the project site from R-1-6 and R-1-20 to R-1-4 and R-1-5, a General Plan amendment from Rural Residential and Low Density Residential to Low Density Residential, and a Conditional Use Permit to establish R-1-4 zoning. The proposed project would result in on-site infrastructure improvements, including new local residential streets and new and relocated utilities. The proposed project would include ROW dedications and street improvements, including the build out of Seminole Avenue and frontage improvements on Morrison Street, including curb, gutter, and sidewalks. Construction is proposed to begin in February 2023 and continue through February 2025. See Figure 3-2 for site layout.

8. **Surrounding Land Use Designations and Settings:**

North Public Land, Low Density Residential (City of Tulare 2035 General Plan), currently agricultural

South Rural Residential, Residential Estate (City of Tulare 2035 General Plan), currently agricultural

East Rural Residential, Residential Estate (City of Tulare 2035 General Plan), currently agricultural

West Low Density Residential (City of Tulare 2035 General Plan), developed KCOK Ranch 1 Subdivision

9. **Required Approvals:** The following discretionary approvals are required from The City of Tulare for the proposed project:

    - City of Tulare Tentative Subdivision Map
    - Zone Amendment to R-1-4 and R-1-5
    - General Plan Amendment to Low Density Residential and Small Lot Residential
    - City of Tulare Conditional Use Permit for R-1-4 zoning

10. **Native American Consultation:** The Santa Rosa Rancheria Tachi Yokut Tribe is the only tribe that has requested to be notified of projects within the City of Tulare for AB 52 tribal consultation. Other tribes in the area were notified of the project pursuant to SB 18. The Santa Rosa Rancheria Tachi Yokut Tribe was notified on January 18, 2022. The tribe responded on February 2, 2022 and requested that a cultural presentation be conducted prior to ground disturbance. The City of Tulare has agreed to this request and a cultural presentation will be required as a CEQA mitigation measure and a condition of project approval.

11. **Parking and access:** Vehicular Access to the project site will be available via Seminole Ave, Spyglass St, and the proposed Castle Rock Ave. The proposed residential development will provide both covered (garage) and uncovered street parking, which complies with the City of Tulare Code of Ordinances § 10.192.040 requiring two covered spaces per dwelling unit. During construction, workers will utilize existing facility parking areas and/or temporary construction staging areas for parking of vehicles and equipment.

12. **Landscaping and Design:** The landscape and design plans will be required at time the project submits for building permit on the project and will be subject to the City of Tulare's Water Efficient Landscape Ordinance (WELO).

13. **Utilities and Public Services:** City services (water, sewer, law enforcement, fire protection etc.) will be extended to the proposed Project area upon development. The project borders a proposed stormwater retention basin to retain stormwater on-site.

Acronyms

BMP	Best Management Practices
CAA	Clean Air Act
CCR	California Code of Regulation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CWA	California Water Act
DHS	Department of Health Services
FEIR	Final Environmental Impact Report
FPPA	Farmland Protection Policy Act
ISMND	Initial Study Mitigated Negative Declaration
MCL	Maximum Contaminant Level
ND	Negative Declaration
NAC	Noise Abatement Criteria
RCRA	Resource Conservation and Recovery Act of 1976
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWPPP	Storm Water Pollution Prevention Plan

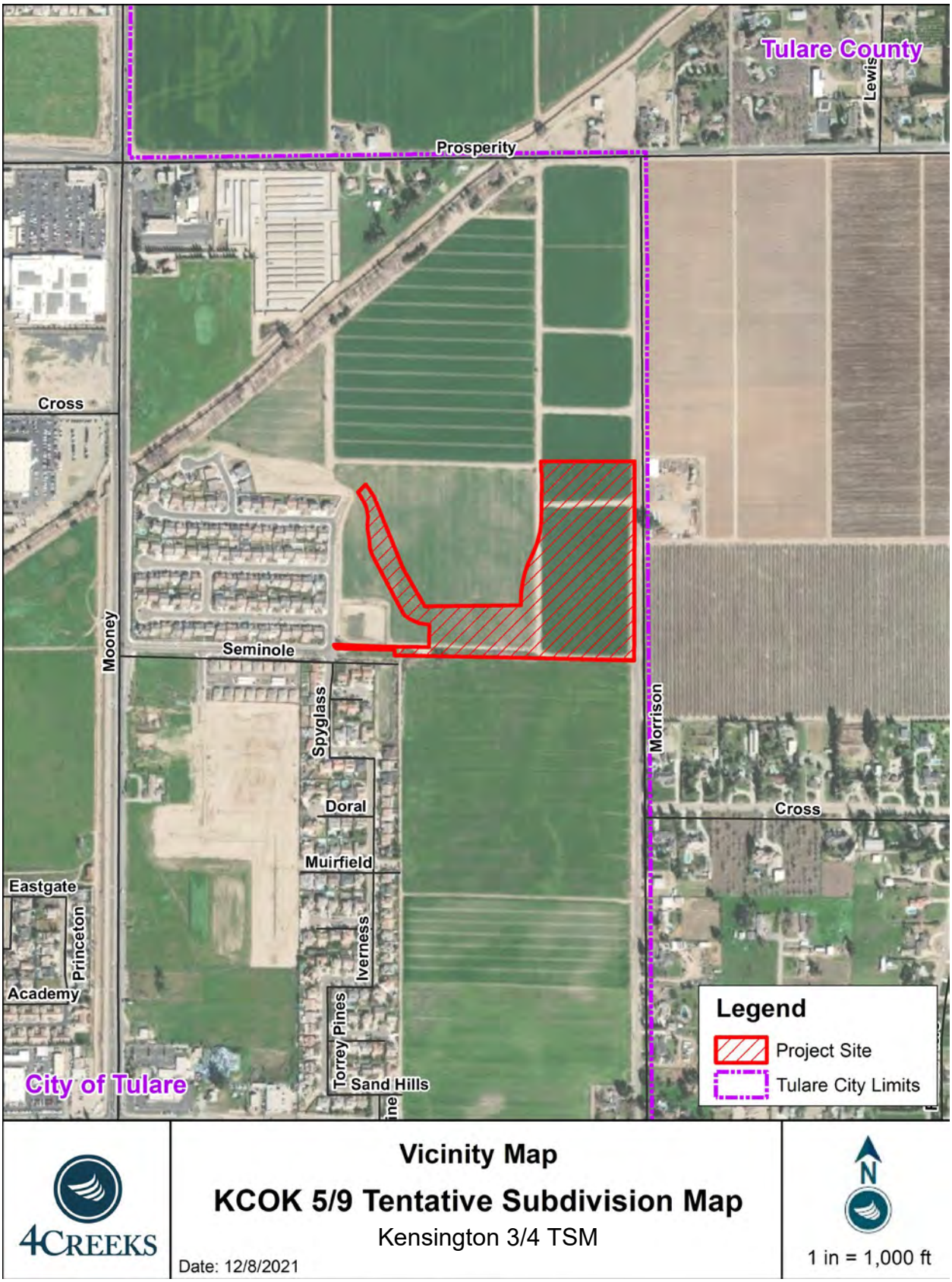


Figure 3-1. Vicinity Map.

Figure 3-2. Site Plan.

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately support by the information sources a lead agency cites, in the parentheses following each question. A "No Impact" answer is adequately supported if the reference information sources show that the impact simply does not apply to projects like the one involved (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).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR if required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequate analyzed in an earlier EIR or negative declaration. Section 15063(c) (3)(D). In this case, a brief discussion should identify the following.

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated." Describe and mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

3.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture and Forest Resources	☐ Hazards and Hazardous Materials	☐ Recreation
☐ Air Quality	☐ Hydrology and Water Quality	☐ Transportation
☐ Biological Resources	☐ Land Use and Planning	☐Utilities and Service System
☐ Cultural Resources	☐ Mineral Resources	☐ Wildfire
☐ Energy	☐ Noise	☐ Mandatory Findings of Significance
☐ Geology and soils	☐ Population	

DETERMINATION: (To be completed by the Lead Agency) Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

On the basis of this initial evaluation:

☐ 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. A Negative Declaration 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 requested.

_____ _____

SIGNATURE DATE

_____ City of Tulare

PRINTED NAME AGENCY

3.5 ENVIRONMENTAL ANALYSIS

The following section provides an evaluation of the impact categories and questions contained in the checklist and identify mitigation measures, if applicable.

I. AESTHETICS

Except as provided in Public Resource Code Section 210999, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☑	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within 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 a 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?	☐	☐	☑	☐

Environmental Setting

There are no aesthetic resources identified in the City of Tulare General Plan; however, the views of the Sierra Nevada Mountains are considered to be an important scenic vista in Tulare County.

Sierra Nevada Mountains: The Sierra Nevada Mountain range and its foothills stretch along the east area of the county and are a valuable aesthetic resource. Additionally, Sequoia National Park is located within the stretch of the Sierra Nevada Mountains located in Tulare County. Sequoia National Forest is a U.S. National Forest known for its mountain scenery and natural resources. Located directly north of Sequoia National Park is Kings Canyon National Park, a U.S. National Park also known for its towering sequoia trees and scenic vistas. The Sierra Nevada Mountains are approximately 17 miles east of the proposed project site, but views of the mountains are not visible on most days due to poor air quality.

The following photos demonstrate the aesthetic character of the project area. As shown, the proposed project site is on a relatively flat area with agriculture, surrounded by residential and agriculture uses. The Sierra Nevada Mountains are slightly visible facing east.

Photo 1: West site boundary (View East). Source: Google Maps March 2020

Photo 2: East Site boundary (View West). Source: Google Maps March 2019

Photo 3: NorthWest Site Boundary (View South East). Source: Google Maps March 2020

Photo 4: South East site boundary (View North East). Source: Google Maps March 2019

Regulatory Setting

State Scenic Highways: The State Scenic Highway Program is implemented by Caltrans and was developed to preserve the aesthetic quality of certain highway corridors. Highways included in this program are designated as scenic highways. A highway is designated as scenic based on how much of the natural landscape is visible to travelers, the quality of that landscape, and the extent to which development obstructs views of the landscape. There are no designated State Scenic Highways or highways that are eligible for designation within the City of Tulare.

City of Tulare General Plan: The City of Tulare General Plan includes the following aesthetic goals and policies that are intended to protect the City's aesthetic resources and are relevant to the proposed project.

- LU-P13.14 Scenic Features and Views. The City shall preserve its scenic features and view corridors to the mountains.

- LU-P13.2 City Image. The City shall encourage a high level of design quality (architectural and landscape) for all new development in order to create a pleasant living environment, a source of community pride, and an improved overall City image.

Discussion

a) Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact: A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. The Sierra Nevada Mountains are the primary scenic vista within this region and the Land Use Element of the City's General Plan states that view corridors to the mountains should be preserved. These view corridors are typically found along major arterial streets in the City and on the periphery of the City and would not be impacted by this project. The foothills of the Sierra Nevada Mountains are approximately 17 miles east of the proposed project site and are not visible on most days due to poor air quality.

Views of the Sierra Nevada Mountains would largely be unaffected by the proposed project because of the distance between the project site and the mountains and the limited visibility of these features due to air quality. The impact is *less than significant.*

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway?

No Impact: There are no Officially Designated State Scenic Highways within the City of Tulare. Highway 198 is the nearest Eligible State Scenic Highway and is located approximately 7 miles north of the project site. Significant urban development between the project site and Highway 198 completely eliminates visibility of the project site from the highway. There is *no impact.*

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from a 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?

No Impact: The proposed project site is located within City limits and is within an urbanized area. The proposed project would not conflict with applicable zoning or other regulations governing scenic quality. There is *no impact.*

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

Less than Significant Impact: The proposed project would result in new lighting sources on the project site consistent with adjacent residential development. New lighting sources would include interior lighting from residences, street lighting, and security lighting. All street and landscape lighting will be consistent with the City's lighting standards, which are developed to minimize impacts related to excessive light and glare. Additionally, the project would comply with the City's General Plan Policies LU-P13.24 and LU-P13.25 to prevent excess spillover lighting that could otherwise occur within the vicinity of the project area. Although the project will introduce new light sources to the area, all lighting will be consistent with adjacent residential land uses and the City's lighting standards. The impacts are *less than significant.*

II. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 forestland 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 forestland to non-forest use?	☐	☐	☑	☐

Environmental Setting

Agriculture is a vital component of the City of Tulare's economy and is a significant source of the City's cultural identity. As such, preserving the productivity of agricultural lands is integral to maintaining the City's culture and economic viability.

The proposed project site is not under Williamson Act Contract but is designated as Prime Farmland under the Important Farmland Mapping and Monitoring Program (FMMP). The project site is currently operated as a hay field and is bounded by agricultural activities to the North, South and East.

Regulatory Setting

California Land Conservation Act of 1965: The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, allows local governments to enter into contracts with private landowners to restrict the activities on specific parcels of land to agricultural or open space uses. The landowners benefit from the contract by receiving greatly reduced property tax assessments. The California Land Conservation Act is overseen by the California Department of Conservation; however local governments are responsible for determining specific allowed uses and enforcing the contract. The City of Tulare General Plan states that the City encourages the use of Williamson Act contracts on parcels located outside the urban development boundary.

California Farmland Mapping and Monitoring Program (FMMP): The FMMP is implemented by the California Department of Conservation (DOC) to conserve and protect agricultural lands within the State. Land is included in this program based on soil type, annual crop yields, and other factors that influence the quality of farmland. The FMMP mapping categories for the most important statewide farmland are as follows:

- ***Prime Farmland*** has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years prior to classification and is capable of producing sustained yields.
- ***Farmland of Statewide Importance*** has also been used for irrigated production in the four years prior to classification and is only slightly poorer quality than Prime Farmland.
- ***Unique Farmland*** has been cropped in the four years prior to classification and does not meet the criteria for Prime Farmland or Farmland of Statewide Importance but has produced specific crops with high economic value.
- ***Farmland of Local Importance*** encompasses farmland that does not meet the criteria for the previous three categories. These may lack irrigation, produce major crops, be zoned as agricultural, and/or support dairy.
- ***Grazing Land*** has vegetation that is suitable for grazing livestock.

City of Tulare General Plan: The Conservation and Open Space Element of the City's General Plan includes the following agricultural resource goals and policies that are potentially applicable to the proposed project:

- COS-P3.1 Protect Interim Agricultural Activity. The City shall protect the viability of existing interim agricultural activity in the UDB to the extent possible.

- COS-P3.2 Agricultural Buffers. The City shall require that agricultural land uses designated for long-term protection (in a Williamson Act contract or under a conservation easement located outside the City's UDB) shall be buffered from urban land uses through the use of techniques including, but not limited to, spatial separations (e.g. greenbelts, open space setbacks, etc.), transitions in density, soundwalls, fencing, and/or berming.
- COS-P3.3 Agricultural Disclosures. The City shall require that developers of residential projects, which are within general proximity of agricultural operations in the city, to provide notification to new homeowners within their deeds of the City's right to farm ordinance.
- COS-P3.4 Discourage Leapfrog Development. The City shall discourage leapfrog development (defined as urban development more than 1/2 mile from existing urban development) and development of peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations and contribute to premature conversion.
- COS-P3.9 Williamson Act Contracts. The City shall encourage the use of Williamson Act contracts on parcels located outside the UDB.
- COS-P3.10 Williamson Act Contracts near City Limits. The City shall protest the formation of new Williamson Act or Super Williamson Act contracts within the UDB.
- COS-P3.11 Williamson Act Non-Renewal in UDB. The City shall support non-renewal or cancellation processes for Williamson Act designated lands within the City of Tulare UDB.
- COS-P3.12 Mitigation for Agricultural Land Conversion. The City shall create and adopt a mitigation program to address the conversion of Prime Farmland & Farmland of Statewide Importance within the UDB and outside the city limits to non-agricultural uses. This mitigation program shall:
    - Require a 1:1 ratio of agricultural land preserved for every acre of land converted.
    - Require land to be preserved be equivalent to the land converted, e.g. Prime Farmland, and further require that the land to be preserved has adequate existing water supply to support agricultural use, is designated and zoned for agriculture, is located outside of a city UDB, and is within the southern San Joaquin Valley.
    - Require mitigation prior to or at time of impact.
    - Allow mitigation to be provided either by purchase of agricultural easements or by payment of agricultural mitigation fees, but state that purchase of conservation easements is the preferred form of mitigation. Both purchase of easements and payment of mitigation fees should cover not only the cost of an agricultural easement, but additional costs of transactional fees and administering, monitoring, and enforcing the easement.
    - Require easements to be held by and/or mitigation fees to be transferred to a qualifying entity, such as a local land trust with demonstrated experience administering, monitoring and enforcing agricultural easements.
    - Require the qualifying entity to submit annual status and monitoring reports to the City and to Tulare County.
    - Allow stacking of conservation and agricultural easements if habitat needs of species on conservation easement are compatible with agricultural activities/use on agricultural easement.
    - Allow exemptions for conversion of land to agricultural tourism uses, agricultural processing uses, agricultural buffers, public facilities, and roadways.
- COS-P3.13 Farmland Trust and Funding Sources. The City shall encourage the trust or other qualifying entity to pursue a variety of funding sources (grants, donations, taxes, or other funds) to fund further implementation of mitigation for agricultural land conversion.

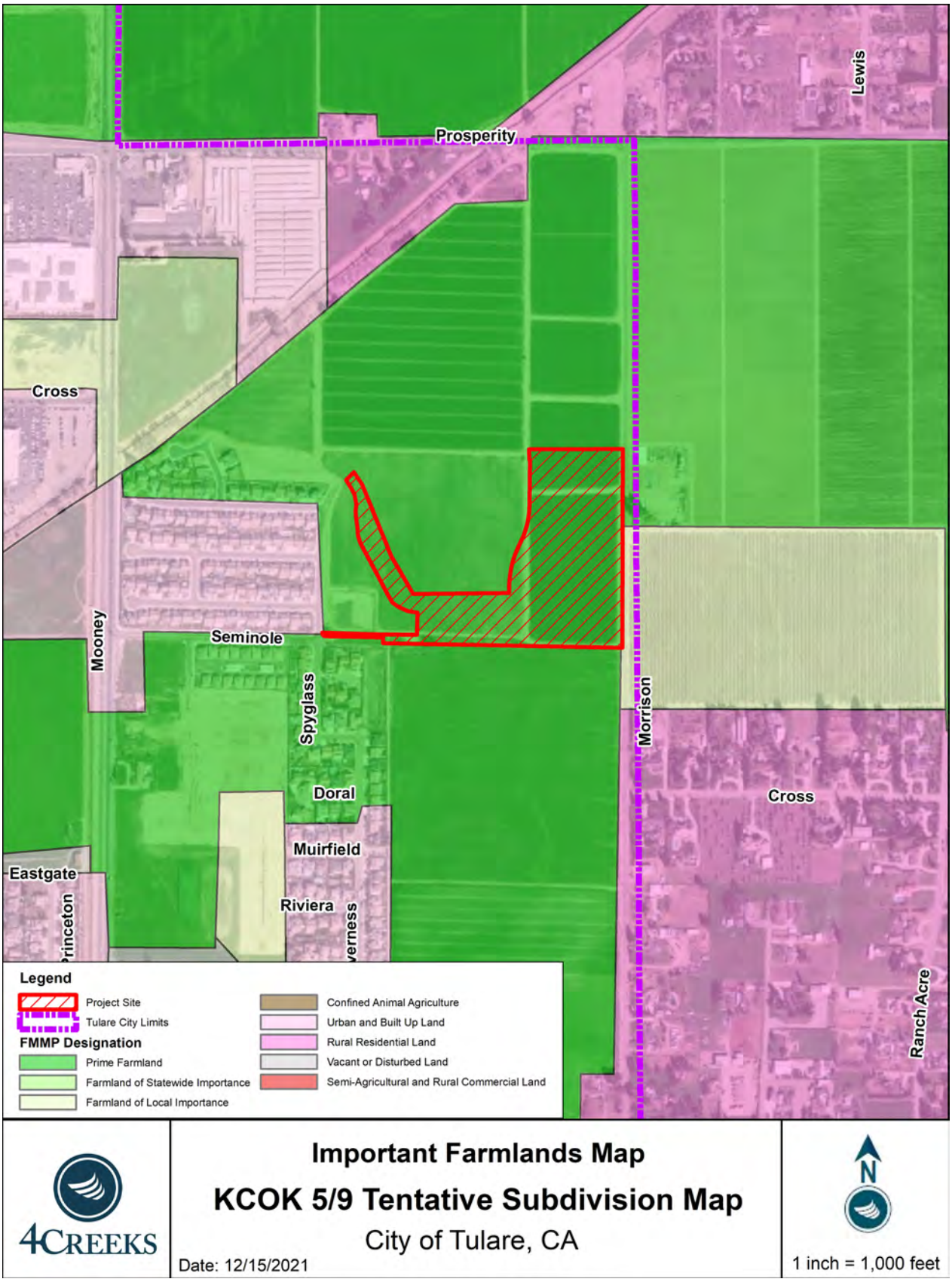


Figure 3-3. Important Farmland Map.

Discussion

a) Would the project 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: The proposed site is classified as Prime Farmland by the California Department of Conservation farmland mapping and monitoring program and the project will convert prime agricultural land to residential uses. The site is located within the City of Tulare Urban Development Boundary and City Limits and the site has been designated for non-agricultural land use by the City's General Plan. The Project is consistent with the policies in the Conservation Element of the General Plan. As such, no mitigation is required, and the impact is considered *less than significant.*

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?

No Impact: The proposed project site is not zoned for agricultural use or under a Williamson Act Contract. There is *no impact.*

c) Would the project 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 site is not zoned for forest or timberland production and there is no forest land located on the site. Therefore, *no impacts* would occur.

d) Would the project result in the loss of forestland or conversion of forest land to non-forest use?

No Impact: No conversion of forestland, as defined under Public Resource Code or General Code, will occur as a result of the project and there would be *no impacts*.

e) Would the project 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 forestland to non-forest use?

Less than Significant Impact with Mitigation: As discussed above, the proposed project site is presently under active agriculture use and implementation of the proposed project would convert agricultural land to residential uses. However, while the project site is currently being farmed, the site is not designated for agriculture in the City's General Plan or Zoning Ordinance (Title 10 of the Tulare Municipal Code). Adjacent farmland will not be converted to non-agricultural use as a result of the proposed project. Therefore, the proposed project would result in a *less than significant impact.*

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?	☐	☐	☑	☐

Environmental Setting

Air pollution is directly related to regional topography. Topographic features can either stimulate the movement of air or restrict air movement. California is divided into regional air basins based on topographic air drainage features. The proposed project site is within the San Joaquin Valley Air Basin, which is bordered by the Sierra Nevada Mountains to the east, Coastal Ranges to the west, and the Tehachapi Mountains to the south.

The mountain ranges surrounding the San Joaquin Valley Air Basin (SJVAB) serve to restrict air movement and prevent the dispersal of pollution. As a result, the SJVAB is highly susceptible to pollution accumulation over time. As shown in the Table 3-1, the SJVAB is in nonattainment for several pollutant standards.

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – One hour	No Federal Standard[f]	Nonattainment/Severe
Ozone – Eight hour	Nonattainment/Extreme[e]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] See 40 CFR Part 81
[b] See CCR Title 17 Sections 60200-60210
[c] On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.
[d] The Valley is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5

NAAQS on November 13, 2009 (effective December 14, 2009).
[e] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).
[f] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

Table 3-1. San Joaquin Valley Attainment Status; Source: SJVAPCD

Regulatory Setting

Federal Clean Air Act – The 1977 Federal Clean Air Act (CAA) authorized the establishment of the National Ambient Air Quality Standards (NAAQS) and set deadlines for their attainment. The Clean Air Act identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and an attainment demonstration, and incorporates more stringent sanctions for failure to meet interim milestones. The U.S. EPA is the federal agency charged with administering the Act and other air quality-related legislation. EPA's principal functions include setting NAAQS; establishing minimum national emission limits for major sources of pollution; and promulgating regulations. Under CAA, the NCCAB is identified as an attainment area for all pollutants.

California Clean Air Act – California Air Resources Board coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, California Air Resources Board monitors existing air quality, establishes California Ambient Air Quality Standards, and limits allowable emissions from vehicular sources. Regulatory authority within established air basins is provided by air pollution control and management districts, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The project is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District.

The state and federal standards for the criteria pollutants are presented in Section 8.4 of The San Joaquin Valley Unified Air Pollution Control District's 2015 "Guidance for Assessing and Mitigating Air Quality Impacts". These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation and other aspects of general welfare. The U.S. EPA revoked the national 1-hour ozone standard on June 15, 2005, and the annual PM_{10} standard on September 21, 2006, when a new $PM_{2.5}$ 24-hour standard was established.

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (03)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet 8 Hour Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.075 ppm (147 µg/m³)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	20 µg/m3		--		
	24 Hour			35 µg/m³		

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	15 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	--	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		--	--	
Nitrogen Dioxide (NO_2) [8]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	--	Gas Phase Annual Chemiluminescence
	Arithmetic Mean	0.030 ppm (57 µg/m³)		53 ppb (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)9	--	
	Annual Arithmetic Mean	--		0.030 ppm (for certain areas)9	--	
Lead[10,11]	30 Day Average	1.5 µg/m³	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m3 (for certain areas)11	Same as Primary Standard	
	Rolling 3-Month Average	--		0.15 µg/m³		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standard		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies. 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas. 4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used. 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA. 8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively. 9. On June 2, 2010, a new 1-hour SO2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm. 10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants. 11. The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved. 12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.						

Table 3-2. Ambient Air Quality Standards; Source: SJVAPCD

San Joaquin Valley Air Pollution Control District (SJVAPCD) – The SJVAPCD is responsible for enforcing air quality standards in the project area. To meet state and federal air quality objectives, the SJVAPCD adopted the following thresholds of significance for projects:

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
CO	100	100	100
Nox	10	10	10
ROG	10	10	10
SOx	27	27	27
PM10	15	15	15
PM2.5	15	15	15

Table 3-3. SJVAPCD Thresholds of Significance for Criteria Pollutants; Source: SJVAPCD

The following SJVAPCD rules and regulations may apply to the proposed project:

- **Rule 3135:** Dust Control Plan Fee. All projects which include construction, demolition, excavation, extraction, and/or other earth moving activities as defined by Regulation VIII (Described below) are required to submit a Dust Control Plan and required fees to mitigate impacts related to dust.
- **Rule 4101:** Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color and/or have the potential to obstruct visibility.
- **Rule 9510:** Indirect Source Review (ISR). This rule reduces the impact PM10 and NOX emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development projects in order to reduce emissions through onsite mitigation, offsite SJVAPCD administered projects, or a combination of the two. This project will submit an Air Impact Assessment (AIA) application in accordance with Rule 9510's requirements.
- **Regulation VIII:** Fugitive PM10 Prohibitions. Regulation VIII is composed of eight rules which together aim to limit PM10 emissions by reducing fugitive dust. These rules contain required management practices to limit PM10 emissions during construction, demolition, excavation, extraction, and/or other earth moving activities.

Discussion

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

No Impact: The proposed project is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and would result in air pollutant emissions that are regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in Tulare County into compliance with federal and state air quality standards. The air district has Particulate Matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plan for the basin. Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards.

Construction Phase. Project construction would generate pollutant emissions from the following construction activities: site preparation, grading, building construction, application of architectural coatings, and paving. The construction related emissions from these activities were calculated using CalEEMod. The full CalEEMod Report can be found in Appendix A. As shown in Table 3-4 below, project construction related emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Construction	**2.257**	**1.5164**	**0.00438**	**2.2527**	**0.5374**	**0.2874**
SJVAPCD Air Quality Thresholds of Significance	**100**	**10**	**27**	**10**	**15**	**15**
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-4. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Construction; Source: SJVAPCD, CalEEMod Analysis (Appendix A)

Operational Phase. Implementation of the proposed project would result in long-term emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. Operational emissions from these factors were calculated using CalEEMod. The Full CalEEMod Report can be found in Appendix A. As shown in Table 3-5 below, the project's operational emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Operations	**3.3312**	**1.0480**	**0.00774**	**.5356**	**.7917**	**0.2230**
SJVAPCD Air Quality Thresholds of Significance	**100**	**10**	**27**	**10**	**15**	**15**
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-5. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Operations; Source: SJVAPCD, CalEEMod Analysis (Appendix A)

Because the emissions from both construction and operation of the proposed project would be below the thresholds of significance established by the SJVAPCD, the project would not conflict with or obstruct implementation of an applicable air quality plan and there is *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 SJVAPCD accounts for cumulative impacts to air quality in Section 1.8 "Thresholds of Significance – Cumulative Impacts" in its 2015 Guide for Assessing and Mitigating Air Quality Impacts. The SJVAPCD considered basin-wide cumulative impacts to air quality when developing its significance thresholds. Because construction and operational emissions are below the significance thresholds adopted by the air district, and compliance with SJVAPCD rules will address any cumulative impacts regarding operational emissions, impacts regarding cumulative emissions would be *less than significant.*

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

Less Than Significant Impact: The single-family residences located directly west of the project site are the closest sensitive receptors. The project does not include any project components identified by the California Air Resources Board that could potentially impact any sensitive receptors. These include heavily traveled roads, distribution centers, fueling stations, and dry-cleaning operations. The project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be *less than significant.*

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

Less Than Significant Impact: The project will create temporary localized odors during project construction. The proposed project will not introduce a conflicting land use (surrounding land includes residential neighborhoods) to the area and will not have any component that would typically emit odors. The project would not create objectionable odors affecting a substantial number of people. Therefore, impacts would be *less than significant.*

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 & Game 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 Game or US Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director 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?	☐	☐	☐	☑

Discussion for this section originates from the Habitat Assessment that was prepared for this project by Soar Environmental Consulting, Inc. to identify sensitive biological resources, provide project impact analysis, and suggest mitigation measures. The full document can be found in Appendix B of this Initial Study.

The Project Site has been disturbed through farming practices for many years. The potential for sensitive-species to be present onsite is relatively low, however, the Project site contains potentially suitable habitat for the following species: blunt-nosed leopard lizard, San Joaquin kit fox, Tipton kangaroo rat, Swainson's hawk, tricolored blackbird, valley elderberry longhorn beetle, vernal pool fairy shrimp, and western yellow-billed cuckoo. None of the above referenced special status species were observed on the Project site. However, a western burrowing owl (Athene cunicularia hypugaea) was observed roosting in the vicinity of the project site. Two active burrowing owl dens were identified approximately 164 feet from where Phase 9 construction is proposed to take place. The burrowing owl is listed under the MBTA as a

Bird of Conservation Concern (BCC) and listed by the state of California as Vulnerable (S3) which puts it at risk of extirpation in the state due to a fairly restricted range, population declines, threats, or other factors. The findings for this report are summarized below.

Environmental Setting

The Project site is an open grass field dominated by a single species of grass in the Poaceae family, with Russian thistle (Salsola kali) sparsely scattered around the area. Land use in the area is residential and agricultural. The topography is flat at an elevation of approximately 300 feet above mean sea level. There are no trees or bushes on the Project site. A city stormwater retention pond is located in the southwest corner of the property, surrounded by a chain link fence (Photo 10). The Santa Fe trail runs along an irrigation canal located to the northwest. There is a residential neighborhood to the west, the Project site is otherwise surrounded by grassy agricultural fields, with dirt roads crisscrossing around the perimeters of the surrounding fields. These dirt roads were being used as dog walking paths by the local residents.

Due to a high level of disturbance, urbanization, and agricultural practices, habitat conditions do not appear to be conducive for the listed plant species in this report. There are several active ground squirrel burrows within the Project area, two of which appear to be occupied by western burrowing owl (Athene cunicularia hypugaea) (Photos 14).

Regulatory Setting

Federal Endangered Species Act (FESA): defines an *endangered species* as "any species or subspecies that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712): FMBTA prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States, even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Although the USFWS and its parent administration, the U.S. Department of the Interior, have traditionally interpreted the FMBTA as prohibiting incidental as well as intentional "take" of birds, a January 2018 legal opinion issued by the Department of the Interior now states that incidental take of migratory birds while engaging in otherwise lawful activities is permissible under the FMBTA. However, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities.

Birds of Prey (CA Fish and Game Code Section 3503.5): Birds of prey are protected in California under provisions of the Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

Clean Water Act: Section 404 of the Clean Water Act of (1972) is to maintain, restore, and enhance the physical, chemical, and biological integrity of the nation's waters. Under Section 404 of the Clean Water

Act, the US Army Corps of Engineers (USACE) regulates discharges of dredged and fill materials into "waters of the United States" (jurisdictional waters). Waters of the US including navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

California Endangered Species Act (CESA): prohibits the take of any state-listed threatened and endangered species. CESA defines *take* as "any action or attempt to hunt, pursue, catch, capture, or kill any listed species." If the proposed project results in a take of a listed species, a permit pursuant to Section 2080 of CESA is required from the CDFG.

Discussion

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 & Game or U.S. fish and Wildlife Service?

Less Than Significant Impact with Mitigation:

Prior to performing the Habitat Assessment, Soar Environmental conducted a records search for threatened or endangered species that could potentially occur in the vicinity of the Project area. The records search included a review of the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), and California Native Plant Society (CNPS) Online Rare Plant Inventory. The area covered by the data records search included USGS 7.5-minute quadrangles of Tulare, Cairns Corner, Exeter, Goshen, Paige, Taylor Weir, Tipton, Visalia, and Woodville 7.5-minute USGS quadrangles. From these sources a list of special-status plant and animal species was generated. The CNDDB records search indicated 8 State-listed special-status wildlife species most likely to occur within or near the Project Site would include:

- Blunt-nosed leopard lizard (Gambelia sila)
- San Joaquin kit fox (Vulpes macrotis mutica)
- Swainson's hawk (Buteo swainsoni)
- Tipton kangaroo rat (Dipodomys nitratoides nitratoides)
- Tricolored blackbird (Agelaius tricolor)
- Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)
- Vernal pool fairy shrimp (Branchinecta lynchi)
- Western yellow-billed cuckoo (Coccyzus americanus occidentalis)

The IPaC search identified 13 additional Federally listed special-status species likely to occur within or near the Project Site including:

- Fisher (Pekania pennanti)
- California condor (*Gymnogyps californianus*)
- California red-legged frog (*Rana draytonii*)
- California tiger salamander (*Ambystoma californiense*)
- Conservancy fairy shrimp (*Branchinecta conservatio*)

- Delta smelt (*Hypomesus transpacificus*)
- Fresno kangaroo rat (*Dipodomys nitratoides exilis*)
- Giant garter snake (*Thamnophis gigas*)
- Monarch butterfly (*Danaus plexippus*)
- Vernal pool tadpole shrimp (*Lepidurus packardi*)
- Hoover's spurge (Chamaesyce hooveri)
- San Joaquin adobe sunburst (Pseudobahia peirsonii)
- San Joaquin orcutt grass (Orcuttia inaequalis)

A search of the California Native Plant Society (CNPS) Online Rare Plant Inventory identified the following 2 special-status plant species likely to occur within or proximate to the Project Site:

- California Jewelflower (*Caulanthus californicus*)
- San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

On January 20, 2022, Soar Environmental biologist Travis Albert conducted a Habitat Assessment on the property for the above-mentioned species. Walking the perimeter of the property, and meandering transects throughout the Project site, the surveyor searched for signs of vernal pools, bird nests, possible small mammal dens, identified vegetation, and looked for other signs of wildlife occupancy and suitable habitat. After surveying the Project Site, the surveyor drove the roads within 0.5 mile surrounding the Project footprint searching for signs of special-status species and potentially active nests, or vernal pools. No active nests, vernal pools, or special-status species were observed. A single burrowing owl and 2 active burrowing owl dens were observed on the north side of the project site approximately 164 feet from where phase 9 construction activities will occur. No other special-status species were observed during the Habitat Assessment.

Special status species observations and potential habitat findings are summarized in Table 3-6 below.

Species Name	Species Observed on Project Site	Suitable Habitat on Project Site	Potential for Occurrence
California red-legged frog (Rana draytonii)	No	No	None
California tiger salamander (Ambystoma californiense)	No	No	None
Western burrowing owl (Athene cunicularia hypugaea)	Yes	Yes	Currently Present
California condor (Gymnogyps californianus)	No	No	None
Swainson's hawk (Buteo swainsoni)	No	Yes	Low
Tricolored blackbird (Agelaius tricolor)	No	No	None
Western yellow-billed cuckoo (Coccyzus americanus occidentalis)	No	No	None
Conservancy fairy shrimp (Branchinecta conservatio)	No	No	None
Monarch butterfly (Danaus plexippus)	No	No	None

Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)	No	No	None
Vernal pool fairy shrimp (Branchinecta lynchi)	No	No	None
Vernal pool tadpole shrimp (Lepidurus packardi)	No	No	None
Fisher (Pekania pennanti)	No	No	None
Fresno kangaroo rat (Dipodomys nitratoides exilis)	No	No	None
Tipton kangaroo rat (Dipodomys nitratoides nitratoides)	No	No	None
San Joaquin kit fox (Vulpes macrotis mutica)	No	Yes	Low
Delta smelt (Hypomesus transpacificus)	No	No	None
Blunt-nosed leopard lizard (Gambelia sila)	No	No	None
Giant gartersnake (Thamnophis gigas)	No	No	None
California Jewelflower (Caulanthus californicus)	No	No	None
Hoover's spurge (Euphorbia hooveri)	No	No	None
San Joaquin adobe sunburst (Pseudobahia peirsonii)	No	No	None
San Joaquin valley orcutt grass (Orcuttia inaequalis)	No	No	None

Table 3-3-6. Special Status Species Findings

Burrowing Owl: Burrowing owl is a species of concern in California. Canada and Mexico. They are considered by the U.S. Fish and Wildlife Service (USFWS) to be a Bird of Conservation Concern (BCC). These small owls are between 7.5 to 10 inches tall with a wingspan of 21 to 24 inches. They weigh between 4.5 to 9 ounces. They have yellow eyes arched by white eyebrows and no ear tufts. Adult plumage is brown with barred stripes on the chest, a white chin stripe and spots on the back. Juveniles have no bars on the chest and few spots on the back. Unlike most owls, burrowing owl males are slightly heavier than females and have a longer wingspan. Burrowing owls typically breed from mid-March through August. If owls are nesting, the site must be avoided until the chicks have fledged or it has been determined the nest has failed. Chicks may appear at the burrow entrance when they are about 10 days old. Usually nesting in abandoned ground squirrel burrows, the nest chamber might be lined with excrement, pellets, debris, grass, feathers; sometimes unlined. General habitat includes open dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species is state listed has S3: Vulnerable – at moderate risk of extirpation in the state due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. Circadian activity is all year round, hunting day or night, they frequently perch or stand at burrow entrances in the daytime.

Implementation of Mitigation Measures BIO-1 and BIO-2 will reduce potential impacts to sensitive species to a less than significant level. The impact is *less than significant with Mitigation.*

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 Game or US Fish and Wildlife Service?

No Impact: During the Habitat Assessment performed by Soar Environmental, no riparian habitat nor other sensitive natural communities were observed on-site. Development of the proposed project would not impact 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 (CDFW), or United States Fish and Wildlife Service (USFWS). There is *no impact.*

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director removal, filling, hydrological interruption, or other means?

No Impact: No water or other hydrologic features occur within the limits of construction and operation of the proposed project. There are no jurisdictional water features and no nexus to Waters of the United States. Therefore, no impacts to state or federally protected wetlands would occur due to the proposed project. There is *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?

Less than Significant Impact: The project does not contain streams or other waterways that could be used by migratory fish or as a wildlife corridor for other wildlife species. There is a residential neighborhood to the west, the Project site is otherwise surrounded by grassy agricultural fields, with dirt roads crisscrossing around the perimeters of the surrounding fields. As such, the project would not interfere substantially with the movement of any resident or migratory fish, wildlife species or with established resident or migratory wildlife corridors or impede the use of wildlife nursery sites. The impact is *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 County of Tulare General Plan and the City of Tulare General Plan contain requirements to preserve and maintain Oak (Quercus sp.) species and associated habitats. In addition, the City of Tulare has regulations guiding maintenance of street trees on city roads. No protected tree species or associated habitat have been observed on site, so the policies related to tree preservation do not apply. There is *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 proposed project is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional or state habitat conservation plan. There is *no impact.*

Mitigation Measures for impacts to biological Resources:

Mitigation Measure BIO-1: Take Avoidance Survey Burrowing Owls – Preconstruction Survey. A qualified biologist will conduct a take avoidance survey for burrowing owls within 14 days prior to the start of construction. The survey area will include all suitable habitats on and within 200 meters of project impact areas, where accessible. Implementation of avoidance and minimization measures (Bio MM 2) would be triggered by positive owl presence on the site where project activities will occur.

Mitigation Measure BIO-2: Disturbance-Free Buffer around Active Nest Burrows – Bio Monitoring

If owl presence is detected on the site where project activities will occur during preconstruction surveys (MM BIO-1), one of the following must be implemented:

- Option A: Disturbance-Free Buffer around Active Nest Burrows – Bio Monitoring (Avoidance of Active Nests and Roosts) If project activities are undertaken during the breeding season (February 1 - August 31) and active nest burrows are identified within or near project impact areas, a 200-meter disturbance-free buffer will be established around these nest burrows. If construction activities take place within the established 200-meter buffer, a biological monitor will be present to avoid, minimize, and mitigate potential negative impacts, and a 50-meter disturbance-free buffer will be implemented.

  During the nonbreeding season (September 1 - January 31), resident owls occupying burrows in or near project impact areas will be avoided by establishing a 50-meter disturbance-free buffer. Smaller buffer areas during the nonbreeding season may be implemented with the presence of a qualified biological monitor during all activities occurring within 50 meters of occupied burrows. Buffers will remain in place for the duration of project activities occurring within the vicinity of burrowing owl activity.

- Option B: Passive Relocation of Resident Owls

  During the nonbreeding season (September 1-January 31), resident owls occupying burrows in project impact areas may be passively relocated to alternative habitats. This activity would be conducted per a relocation plan prepared by a qualified biologist. Passive relocation may include one or more of the following elements: 1) establishing a minimum 50-foot buffer around all active burrowing owl burrows, 2) removing all suitable burrows outside the 50-foot buffer and up to 50 meters outside of the impact areas as necessary, 3) installing one- way doors on all potential owl burrows within the 50-foot buffer, 4) leaving one-way doors in place for 48 hours to ensure owls have vacated the burrows, and 5) removing the doors and excavating the remaining burrows within the 50-foot buffer.

V. Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☑	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☑	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☑	☐	☐

Environmental Setting

The history of European settlement in the Tulare County area focused primarily on farming and ranching. European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. European-American settlement of this region began in 1851 with the building of Fort Miller on the San Joaquin River. Unfortunately, hostility grew between American settlers and Native inhabitants, which initially prevented widespread settlement of the area. By the 1860s, the arrival of waves of additional European-American settlers subjugated and removed the Native inhabitants, and the European-American settlers began to inhabit more regions.

In April 1852, Tulare County was created, with the county seat initially located at Woodsville. In 1853 the county seat was removed to Fort Visalia, located in the area bounded by Oak, Center, Garden and Bridge streets. In 1872, the Southern Pacific Railroad founded the City of Tulare by beginning construction of the railroad within Tulare County, connecting the San Joaquin Valley with markets in the north and east. During this time, valley residents constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. Ample water supplies and assured rail transport were particularly important for the new colonies making their living off fruit, grain, and dairy farming.

A Cultural Resources Records Search was conducted by the Taylored Archaeology in January 2022. The records search stated that there have been two previous cultural resource studies conducted within the project area, and that two additional previous cultural resources studies were conducted within one-half mile of the project site. According to the records search, there are no recorded cultural resources within the project area, and there are two recorded resources (Burlington Northern Santa Fe Railway and the Old 99 Ditch of the Tulare Irrigation District) within the one-half mile radius. The full findings of the cultural records search can be found in Appendix C.

Regulatory Setting

National Historic Preservation Act: The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register: The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, experimental, or other value. In order for a resource to be designated as a historical landmark, it must meet the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

City of Tulare General Plan: The City of Tulare General Plan includes the following goals and policies pertaining to cultural and historic resources:

- LU-P13.15 Architectural Heritage. The City shall encourage expressions of its cultural and historic heritage in key central area architectural and other physical design elements (such as murals and/or community art), as well as through encouragement of related cultural events and celebrations.

Goal COS-5 To manage and protect sites of cultural and archaeological importance for the benefit of present and future generations.

- COS-P5.1 Archaeological Resources. The City shall support efforts to protect and/or recover archaeological resources.
- COS-P5.2 Evaluation of Historic Resources. The City shall use appropriate State and Federal standards in evaluating the significance of historical resources that are identified in the city.
- COS-P5.3 Historic Preservation. The City shall encourage the preservation of historic residences and neighborhoods wherever appropriate.
- COS-P5.4 Historic Buildings. The City shall encourage the preservation and adaptive use of historic buildings, particularly in the downtown.
- COS-P5.5 Historic Structures and Sites. The City shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures, sites, and districts. Where applicable, preservation efforts shall conform to the current Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Building.
- COS-P5.6 Protection of Resources with Potential State or Federal Designations. The City shall encourage the protection of cultural and archaeological sites with potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values.
- COS-P5.7 State Historic Building Code. The City shall utilize the State Historic Building Code for designated properties.
- COS-P5.8 Design Compatibility with Historic Structures. The City shall ensure design compatibility of new development within close proximity to designated historic structures and neighborhoods.

- COS-P5.9 Discovery of Archaeological Resources. In the event that archaeological/ paleontological resources are discovered during site excavation, grading, or construction, the City shall require that work on the site be suspended within 100 feet of the resource until the significance of the features can be determined by a qualified archaeologist/ paleontologist. If significant resources are determined to exist, an archaeologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.
- COS-P5.10 Discovery of Human Remains. Consistent with Section 7050.5 of the California Health and Safety Code and CEQA Guidelines (Section 15064.5), if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). If any human remains are discovered or recognized in any location on the project site, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

    - The Tulare County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and
    - If the remains are of Native American origin,

        - The descendants of the deceased Native Americans have made a timely recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98.
        - The Native American Heritage Commission was unable to identify a descendant, or the descendant failed to make a recommendation within 24 hours after being notified by the commission, or
        - The landowner or his or her authorized representative rejects any timely recommendations of the descendent, and mediation conducted by the Native American Heritage Commission has failed to provide measures acceptable to the landowner.

- COS-P5.11 Impact Mitigation. If preservation of cultural/historical resources is not feasible, the City shall make every effort to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.
- COS-P5.12 Mitigation Monitoring for Historical Resources. The City shall develop standards for monitoring mitigation measures established for the protection of historical resources prior to development.
- COS-P5.13 Alteration of Sites with Identified Cultural Resources. When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. The City shall permit development in these areas only after a site-specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.
- COS-P5.14 Education Program Support. The City shall support local, state, and national education programs on cultural and archaeological resources.

- COS-P5.15 Solicit Input from Local Native Americans. The City shall solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- COS-P5.16 Confidentiality of Archaeological Sites. The City shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect resources that are determined to exist. An archaeologist/paleontologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.
- COS-P5.17 Cooperation of Property Owners. The City shall encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities, and encourage public support for the preservation of these resources.
- COS-P5.18 Archaeological Resource Surveys. Prior to project approval, the City shall require project applicant to have a qualified archaeologist conduct the following activities: (1) conduct a record search at the Regional Archaeological Information Center located at California State University Bakersfield and other appropriate historical repositories, (2) conduct field surveys where appropriate, and (3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards (Archaeological Resource Management Reports).

Discussion

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

Less Than Significant Impact with Mitigation: A records search was conducted on behalf of the Applicant by Taylored Archaeology to determine if historical or archaeological sites had previously been recorded within the study area, if the project area had been systematically surveyed by archaeologists prior to the initial study, and/or whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive.

The records search stated that there have been two previous cultural resource studies conducted within the project area, and that two additional previous cultural resources studies were conducted within one-half mile of the project site. According to the records search, there are no recorded cultural resources within the project area, and there are two recorded resources (Burlington Northern Santa Fe Railway and the Old 99 Ditch of the Tulare Irrigation District) within the one-half mile radius. The full findings of the cultural records search can be found in Appendix C.

Based on the results of this records search, no previously recorded cultural resources are located within the project site. Although no historical resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that impacts to this checklist item will be *less than significant with mitigation incorporation*.

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

Less Than Significant Impact with Mitigation: There are no known archaeological resources located within the project area. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that potential impact will be *less than significant with mitigation incorporation.*

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

Less Than Significant Impact with Mitigation: There are no known human remains buried in the project vicinity. If human remains are unearthed during development, there is a potential for a significant impact. As such, implementation of Mitigation Measure CUL-2 will ensure that impacts remain *less than significant with mitigation incorporation.*

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.

Mitigation Measure CUL-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?	☐	☐	☐	☑

Environmental Setting

Southern California Edison (SCE) provides electricity services to the region. SCE serves approximately 15 million people throughout a 50,000 square-mile service area in Central, Coastal, and Southern California. SCE supplies electricity to its customers through a variety of renewable and nonrenewable sources. The Table 3-7 below shows the proportion of each energy resource sold to California consumers by SCE in 2017 as compared to the statewide average.

Fuel Type		SCE Power Mix	California Power Mix
Coal		0%	3%
Large Hydroelectric		8%	12%
Natural Gas		16%	37%
Nuclear		8%	9%
Other (Oil/Petroleum Coke/Waste Heat)		0%	<1%
Unspecified Sources of Power[1]		33%	5%
Eligible Renewables	Biomass	<1%	2%
	Geothermal	6%	5%
	Small Hydro	1%	1%
	Solar	16%	13%
	Wind	12%	11%
	Total Eligible Renewable	**36%**	**33%**

1. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

Table 3-7. 2020 SCE and State average power resources; Source: California Energy Commission

SCE also offers Green Rate Options, which allow consumers to indirectly purchase up to 100% of their energy from renewable sources. To accomplish this, SCE purchases the renewable energy necessary to meet the needs of Green Rate participants from solar renewable developers.

Southern California Gas (SoCalGas) Company provides natural gas services to the project area. Natural gas is an energy source developed from fossil fuels composed primarily of methane (CH4). Approximately 45% of the natural gas burned in California is used for electricity generation, while 21% is consumed by the residential sector, 25% is consumed by the industrial sector, and 9% is consumed by the commercial sector. Approximately 41,418,644 therms of natural gas are consumed annually within the City of Tulare Urban Development Boundary. The residential sector accounts for 18% of the City's total natural gas consumption.

Regulatory Setting

California Code of Regulations, Title 20: Title 20 of the California Code of Regulations establishes standards and requirements for appliance energy efficiency. The standards apply to a broad range of appliances sold in California.

California Code of Regulations, Title 24: Title 24 of the California Code of Regulations is a broad set of standards designed to address the energy efficiency of new and altered homes and commercial buildings. These standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Title 24 requirements are enforced locally by the City of Tulare Building Department.

California Green Building Standards Code (CALGreen): CalGreen is a mandatory green building code that sets minimum environmental standards for new buildings. It includes standards for volatile organic compound (VOC) emitting materials, water conservation, and construction waste recycling

City of Tulare Climate Action Plan (2011): The City of Tulare Climate Action Plan establishes the following Goals and Policies related to energy efficiency and conservation:

Goal 1: Increase energy efficiency and conservation.

1.1 Increase energy efficiency in existing City buildings and facilities through Facility Improvement Measures and by retrofitting Edison-owned streetlights. (City measure)
1.2 Design new City buildings and facilities to exceed California Energy Code requirements by 15%. (City measure)
1.3 Increase energy efficiency in new commercial and residential development and require new residential and commercial development to achieve enhanced energy efficiency and exceed California Energy Code requirements by 15%.
1.4 Reduce the urban heat island effect to cool the local climate and reduce energy consumption by maintaining current rates of public tree planting and increased shading on private property, high albedo surfaces, and cool surfaces.
1.5 Achieve a 20% reduction in water use by 2020 (20X2020) to reduce energy consumed for groundwater pumping.
1.6 Facilitate energy efficiency improvements within the residential building stock.
1.7 Support commercial and industrial profitability and energy efficiency through programs and partnerships.
1.8 Promote voluntary energy efficiency retrofits in the commercial and industrial sectors through financing and incentive programs.
1.9 Require stationary equipment in new industrial development to comply with best practice energy efficiency standards.

1.10 Continue to partner in regional initiatives that encourage achievement of regional energy efficiency targets.

Discussion

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: While construction of the proposed project will result in additional energy consumption, this energy use is not unnecessary or inefficient.

During project construction there would be an increase in energy consumption related to worker trips and operation of construction equipment. This energy use is justified by the energy-efficient nature of the proposed project and would be limited to the greatest extent possible through compliance with local, state, and federal regulations.

Once construction is complete, the project is expected to achieve net zero energy consumption. The proposed project is subject to the California New Residential Zero Net Energy Action Plan 2015-2020. This plan establishes a goal for all residential buildings built after January 1, 2020 to be zero net energy. The California Energy Commission is responsible for the development and enforcement of specific strategies to achieve this goal. These strategies are implemented through Title 24, Part 6 of the California Building Code, which requires developers to include certain measures (including solar panels on all new residential buildings) to achieve required building efficiency standards.

Because the proposed project will comply with all energy efficiency standards required under Title 24, Section 6, and these standards were specifically developed to achieve net zero energy for residential projects, it can be presumed that the project will achieve net zero energy. The impact is *less than significant.*

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact: The proposed project will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. The project will be designed to meet Title 24 and CALGreen requirements. Compliance with these standards will be enforced by the City of Tulare Building Division. There is *no impact.*

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 and 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 geologic feature?	☐	☐	☑	☐

Environmental Setting

Geologic Stability and Seismic Activity

- **Seismicity**: Tulare County is considered to be a low to moderate earthquake hazard area. The San Andreas Fault is the longest and most significant fault zone in California and is approximately 40 miles west of the Tulare County Boundary. Owens Valley fault zone is the only active fault located within Tulare County. Section 5 of the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the project site as likely to experience low to moderate shaking from earthquakes and may experience higher levels if an earthquake were to occur in or near the County. Ground

shaking can result in other geological impacts, including liquefaction, landslides, lateral spreading, subsidence, or collapse.

- **Liquefaction**: Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil, which can result in landslides and lateral spreading. No specific countywide assessment of liquefaction has been performed; however, the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types in the area either too coarse or too high in clay content to be suitable for liquefaction.

- **Landslides**: Landslides refer to a wide variety of processes that result in the downward and outward movement of soil, rock, and vegetation under gravitational influence. Landslides can be caused by both natural and human-induced changes in slope stability and often accompany other natural hazard events, such as floods, wildfire, or earthquake. Eastern portions of the County are considered to be at a higher risk of landslides where steep slopes are present. However, the majority of the County, including the proposed project site, is considered to be at low risk of landslides and mudslides because of its flat topography. The 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan states that occurrence of landslide events within populated areas of Tulare County is unlikely.

- **Subsidence**: Land Subsidence refers to the vertical sinking of land as a result of either manmade or natural underground voids. Subsidence has occurred throughout the Central Valley at differing rates since the 1920's as a result of groundwater, oil, and gas withdrawal. During drought years, Tulare County is prone to accelerated subsidence, with some areas sinking up to 28 feet. Although western portions of the County show signs of deep and shallow subsidence, the majority of the County, including the proposed project site, is not considered to be at risk of subsidence related hazards.

Soils Involved in Project: The proposed project involves construction on two soil types. The properties of these soils are described below:

- **Nord fine sandy loam, 0 to 2 percent slopes:** The Nord series consists of very deep, well drained soils formed primarily from granitic and sedimentary rocks. The Nord series is a member of a coarse-loamy, mixed, superactive, thermic cumulic Haploxerolls taxonomic class and are found in flood plains and alluvial fans.
- **Hanford Sandy Loam, 0 to 2 percent slopes:** The Hanford series consists of very deep, well drained soils that formed in moderately coarse textured alluvium dominantly from granite. The Hanford series is a member of coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents taxonomic class and are found in stream bottoms, floodplains and alluvial fans.

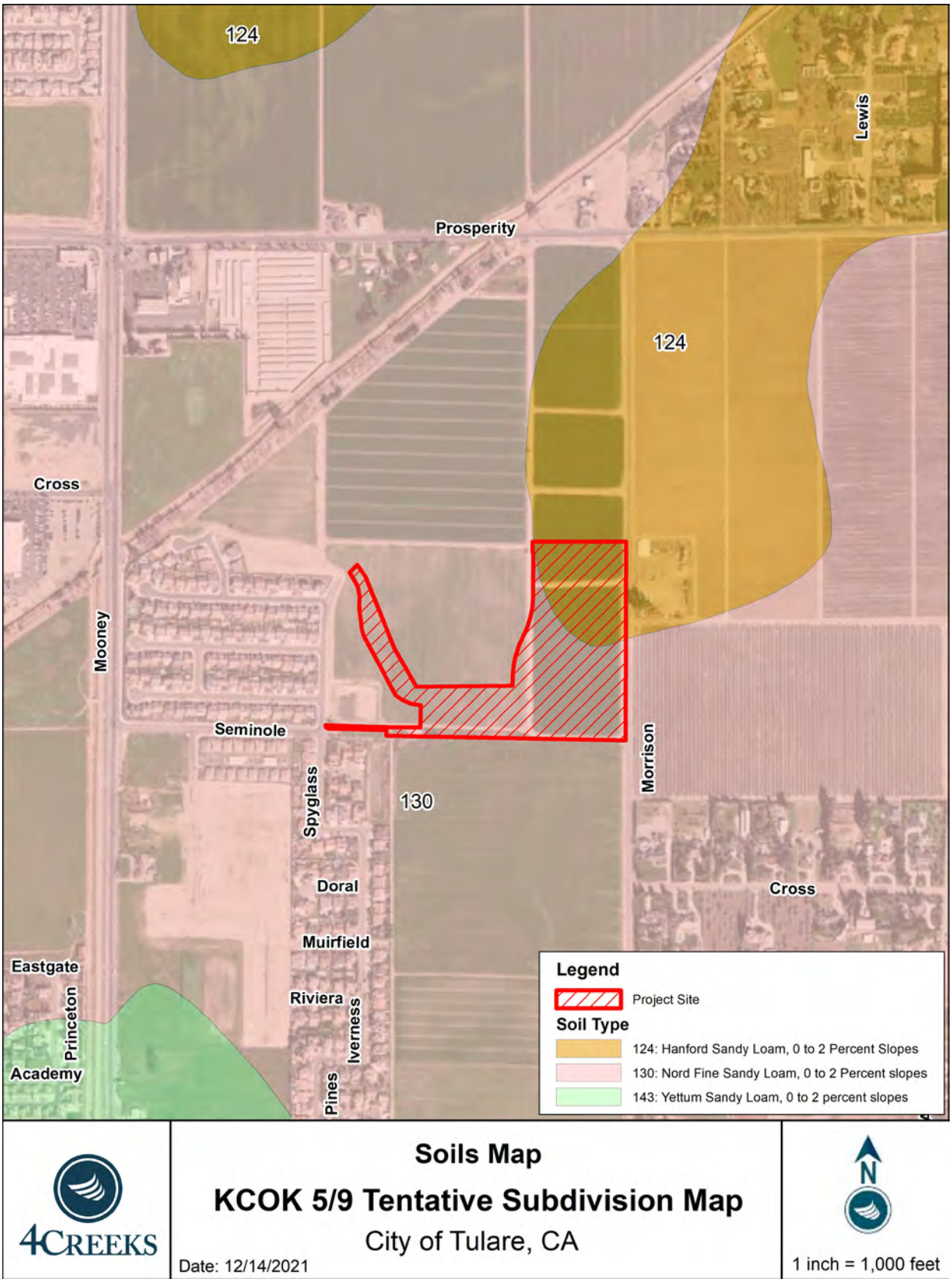


Figure 3-4. Soils Map

Regulatory Setting

California Building Code: The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures and certain equipment.

City of Tulare General Plan: The Safety Element of the City of Tulare General Plan includes the following goals and policies regarding soils and geology.

- SAF-P1.4 Building and Codes. Except as otherwise allowed by State law, the City shall ensure that all new buildings intended for human habitation are designed in compliance with the latest edition of the California Building Code, California Fire Code, and other adopted standards based on risk (e.g., seismic hazards, flooding), type of occupancy, and location (e.g., floodplain, fault).
- SAF-P1.7 Site Investigations. The City shall require applicants to conduct site investigations in areas planned for new development to determine susceptibility to landslides, subsidence/settlement, contamination, and/or flooding.

Goal SAF-4 To protect people and property from seismic and geotechnical hazards.

- SAF-P4.4 Alquist-Priolo Act Compliance. The City shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resources Code, Chapter 7.5) unless the specific provisions of the Act and Title 14 of the California Code of Regulations have been satisfied.
- SAF-P4.5 Subsidence. The City shall confirm that development is not located in any known areas of active subsidence. If urban development may be located in such an area, a special safety study will be prepared and needed safety measures implemented.

Discussion

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.

Less than Significant Impact: According to the Tulare County Multi-Hazard Mitigation Plan, no active faults underlay the project site. Although the project is located in an area of relatively low seismic activity, the project could be affected by ground shaking from nearby faults. The potential for strong seismic ground shaking on the project site is not a significant environmental concern due to the infrequent seismic activity of the area and distance to the faults. The project has no potential to indirectly or directly cause the rupture of an earthquake fault. Therefore, the risk of loss, injury or death involving a rupture of a known earthquake fault would be *less than significant.*

ii. Strong seismic ground shaking?

No Impact: According to the Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan, the project site is located in an area of relatively low seismic activity. The proposed project does not include any activities or components which could feasibly cause strong seismic ground shaking, either directly or indirectly. There is *no impact.*

iii. Seismic-related ground failure, including liquefaction?

No Impact: No specific countywide assessment of liquefaction has been performed; however, the Tulare County Multi-Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types on the project site are unsuitable for liquefaction. According to state soils maps, the project site consists mostly of Nord fine Dandy Loam and Hanford Sandy Loam which do not contain soils suitable for liquefaction. There is *no impact.*

iv. Landslides?

No Impact: The proposed project site is generally flat and there are no hill slopes in the area. As a result, there is almost no potential for landslides. No geologic landforms exist on or near the site that would result in a landslide event. There is *no impact.*

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

Less Than Significant Impact: Because the project site is relatively flat, the potential for erosion is low. However, construction-related activities and increased impermeable surfaces can increase the probability for erosion to occur. Construction-related impacts related to erosion will be temporary and subject to best management practices (BMPs) required by SWPPP, which are developed to prevent significant impacts related to erosion from construction. The project expands on a proposed stormwater retention basin and all stormwaters will be retained in that basin. Because impacts related to erosion would be temporary and limited to construction, and because required best management practices would prevent significant impacts related to erosion, the impact will remain *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: The soils associated with the project site are considered stable and have a low capacity for landslides, lateral spreading, subsidence, liquefaction or collapse. Because the project area is considered to be stable, and this project would not result in a substantial grade change to the topography to the point that it would increase the risk of landslides, lateral spreading, subsidence, liquefaction or collapse, there is *no impact.*

d) Would the project be located on expansive soils, 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: Expansive soils contain substantial amounts of clay, which absorb water and cause the soil to increase in volume. Conversely, the soils associated with the proposed project site are granular,

well-draining, and therefore have a limited ability to absorb water or exhibit expansive behavior. Because the soils associated with the project are not suitable for expansion, implementation of the project will pose no direct or indirect risk to life or property caused by expansive soils and there is *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 proposed project will have access to existing City wastewater infrastructure and would not require the use of septic tanks or alternative wastewater disposal systems. There is *no impact.*

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

Less Than Significant Impact: There are no unique geologic features and no known paleontological resources located within the project area and no excavation proposed in undisturbed soils, particularly to a depth with a potential to unearth paleontological resources. Potential impacts resulting from project implementation would be *less than significant.*

VIII. GREENHOUSE GAS EMISSIONS

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

Environmental Setting

Natural processes and human activities emit greenhouse gases. The presence of GHGs in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34ºC cooler. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The effect of greenhouse gasses on earth's temperature is equivalent to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydro chlorofluorocarbons, and hydro fluorocarbons, per fluorocarbons, sulfur and hexafluoride. Some gases are more effective than others. The Global Warming Potential (GWP) has been calculated for each greenhouse gas to reflect how long it remains in the atmosphere, on average, and how strongly it absorbs energy. Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to global warming. For example, one pound of methane is equivalent to twenty-one pounds of carbon dioxide.

GHGs as defined by AB 32 include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs as defined by AB 32 are summarized in Table 3-8. Each gas's effect on climate change depends on three main factors. The first being the quantity of these gases are in the atmosphere, followed by how long they stay in the atmosphere and finally how strongly they impact global temperatures.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Methane (CH4)	Is a flammable gas and is the main component of natural gas	12 years	21	Emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Carbon dioxide (CO2)	An odorless, colorless, natural greenhouse gas.	30-95 years	1	Enters the atmosphere through burning fossil fuels (coal, natural gas and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
Chloro-fluorocarbons	Gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are non-toxic nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	55-140 years	3,800 to 8,100	Were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone.
Hydro-fluorocarbons	A man-made greenhouse gas. It was developed to replace ozone-depleting gases found in a variety of appliances. Composed of a group of greenhouse gases containing carbon, chlorine an at least one hydrogen atom.	14 years	140 to 11,700	Powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases.
Nitrous oxide (N2O)	Commonly known as laughing gas, is a chemical compound with the formula N2O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effects.	120 years	310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
Pre-fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Sulfur hexafluoride	An inorganic, odorless, colorless, and nontoxic nonflammable gas.	3,200 years	23,900	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing and as a tracer gas.

Table 3-8. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

Regarding the quantity of these gases are in the atmosphere, we first must establish the amount of particular gas in the air, known as Concentration, or abundance, which are measured in parts per million, parts per billion and even parts per trillion**.** To put these measurements in more relatable terms, one part per million is equivalent to one drop of water diluted into about 13 gallons of water, roughly a full tank of gas in a compact car. Therefore, it can be assumed larger emission of greenhouse gases lead to a higher concentration in the atmosphere.

Each of the designated gases described above can reside in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All these gases remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world regardless of the source of the emission.

Regulatory Setting

AB 32: AB 32 set the 2020 greenhouse gas emissions reduction goal into law. It directed the California Air Resources Board to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. The reduction measures to meet the 2020 target are to be adopted by the start of 2011.

SB 32: SB 32 was passed in 2016 to strengthen AB 32. It requires California to reduce greenhouse gas emissions by 40% from the 1990 levels by 2030 by adopting regulations to achieve maximum greenhouse gas emissions.

SB 1078, SB 107 and Executive Order S-14-08: SB 1078, SB 107, and Executive Order S-14-08 require California to generate 20% of its electricity from renewable energy by 2017. SB 107 then changes the 2017 deadline to 2010. Executive Order S-14-08 required that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

SB 100: SB 100, passed in 2018, set a deadline in 2045 for 100% of energy to be renewable. Additionally, by 2030, 60% of all energy must be renewable. California is targeting this goal through solar and other renewable sources.

AB 178: For California to meet its renewable goals, AB 178 was passed in 2018. AB 178 states that starting in 2020 all new low rise residential buildings must be built with solar power.

City of Tulare Climate Action Plan: The City of Tulare Climate Action Plan identifies the following goals and policies to reduce GHG emissions related to new development:

- LU-7.15. Energy Conservation. The County shall encourage the use of solar power and energy conservation building techniques in all new development.
- ERM-4.6. Renewable Energy. The County shall support efforts, when appropriately sited, for the development and use of alternative energy resources, including renewable energy such as wind and solar, biofuels and co-generation.
- ERM-4.7. Reduce Energy Use in County Facilities. Continue to integrate energy efficiency and conservation into all County functions.
- ERM-4.8. Energy Efficiency Standards. The County shall encourage renovations and new development to incorporate energy efficiency and conservation measures that exceed State Title 24 standards. When feasible, the County shall offer incentives for use of energy reduction measures such as expedited permit processing, reduced fees, and technical assistance
- AQ-1.9. Support Off-Site Measures to Reduce Greenhouse Gas Emissions. The County will support and encourage the use of off-site measures or the purchase of carbon offsets to reduce greenhouse gas emissions.

Discussion

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: Greenhouse gas emissions for the construction and operation of the proposed project were modeled using the California Emissions Estimator Model (CalEEMod). The full CalEEMod report can be found in Appendix A.

The SJVAPCD does not provide numeric thresholds to assess the significance of greenhouse gas emissions. Instead, the SJVAPCD "Guidance for Valley Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA" states that projects which achieve a 29% GHG emission reduction compared to Business as Usual (BAU) would be determined to have a less than significant individual and cumulative impact for GHG. "Business as usual" (BAU) conditions are defined based on the year 2005 building energy efficiency, average vehicle emissions, and electricity energy conditions. The BAU conditions assume no improvements in energy efficiency, fuel efficiency, or renewable energy generation beyond that existing today. The 2005 BAU conditions were estimated using CalEEMod.

Implementation of the proposed project would result in long-term greenhouse gas emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. The GHG emissions were estimated using CalEEMod.

	C02 (MT/Year)	CH4 (MT/Year)	N20 (MT/Year)	CO2e (MT/Year)
Operational Emissions	922.0637	1.3282	.0415	967.6364
2005 BAU	1,448.5916	1.4614	.1431	1,527.781
% Reduction From BAU				**37%**

Table 3-9: Projected Project Operational GHG Emissions Compared to 2005 BAU

The project's operational GHG are estimated to be 560 CO2e MT lower than the 2005 BAU. This is a reduction of 37%, more than the 29% threshold. Therefore, the impact is considered *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 proposed project will comply with all Federal, State, and Local rules pertaining to the regulation of greenhouse gas emissions. The project would include solar panels required for new residential construction. In addition, the project will implement Best Performance Standards developed by the SJVAPCD. Projects implementing Best Performance Standards are determined to have a less than significant impact on global climate change. The project will not conflict with any plan, policy, or regulation developed to reduce GHG emissions. There is *no impact.*

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 or excessive noise 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 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 significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

Environmental Setting

The proposed project site is located adjacent to a planned elementary school, approximately 0.87 miles east of the nearest existing school (Live Oak Middle School), 2.46 miles north of the nearest private airstrip (Tulare Motor Sports 2 Heliport), and 4.28 miles north of the nearest public airport (Mefford Field Airport).

The Department of Toxic Substances Control's (DTSC's) Envirostor was used to identify any sites known to be associated with releases of hazardous materials or wastes within the project area. This research confirmed that the project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Regulatory Setting

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S. Code [U.S.C.] §9601 et seq.). The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or the Superfund Act) authorizes the President to respond to releases or threatened releases of hazardous substances into the environment.

Occupational Safety and Health Administration. The Occupational Safety and Health Administration (OSHA) sets and enforces Occupational Safety and Health Standards to assure safe working conditions. OSHA provides training, outreach, education, and compliance assistance to promote safe workplaces. The proposed Project would be subject to OSHA requirements during construction, operation, and maintenance.

Toxic Substances Control Act of 1976 (15 U.S.C. §2601 et seq.). The Toxic Substance Control Act was enacted by Congress in 1976 and authorizes the EPA to regulate any chemical substances determined to cause an unreasonable risk to public health or the environment.

Hazardous Waste Control Law, Title 26. The Hazardous Waste Control Law creates hazardous waste management program requirements. The law is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which contains requirements for the following aspects of hazardous waste management:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

California Code of Regulations, Title 22, Chapter 11. Title 22 of the California Code of Regulations contains regulations for the identification and classification of hazardous wastes. The CCR defines a waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, and/or toxicity.

California Emergency Services Act. The California Emergency Services Act created a multi-agency emergency response plan for the state of California. The Act coordinates various agencies, including CalEPA, Caltrans, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

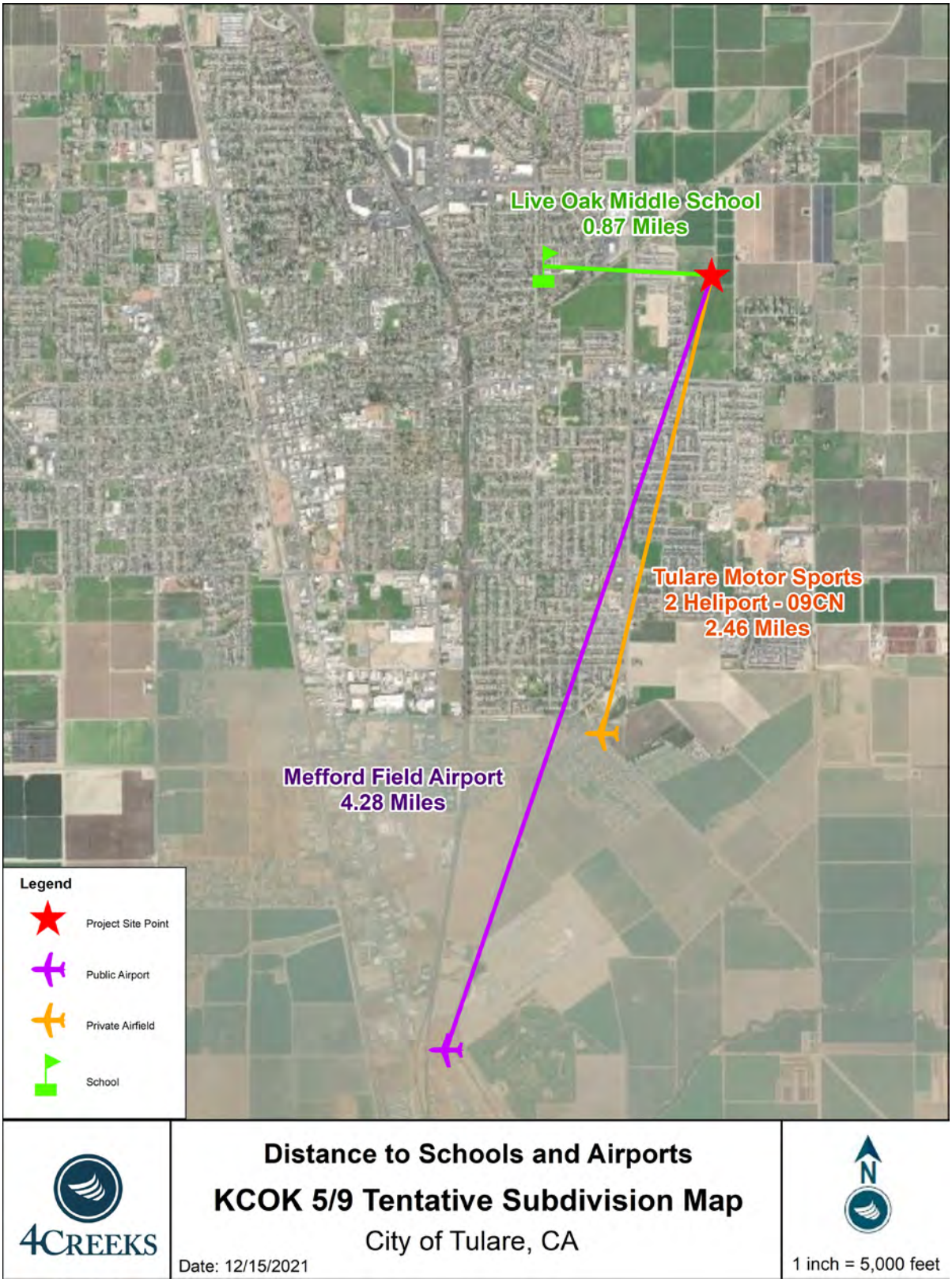


Figure 3-5: Distance to Schools and Airports Map

Hazardous Materials Release Response Plans and Inventory Law of 1985. Pursuant to the Hazardous Materials Release Response Plans and Inventory Law of 1985, local agencies are required to develop "area plans" for response to releases of hazardous materials and wastes. Tulare County maintains a Hazardous Material Incident Response Plan to coordinate emergency response agencies for incidents and requires the submittal of business plans by persons who handle hazardous materials.

City of Tulare General Plan: The City of Tulare General Plan includes the following goals and policies pertaining to hazards and hazardous materials:

- LU-P11.19 Recycling of Hazardous Materials. The City shall require the proper disposal and recycling of hazardous materials.

Goal SAF-1 To regulate future development to ensure the protection of public health and safety from hazards and hazardous materials and the adequate provision of emergency services.

Goal SAF-5 To protect people from the harmful effects of exposure to hazardous materials.

- SAF-P5.2 Hazardous Materials Studies. The City shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project.
- SAF-P5.3 Transporting Hazardous Materials. The City shall strive to ensure hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and federal safety standards.

Discussion

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

Less than Significant Impact: Project construction activities may involve the use and transport of hazardous materials. The use of such materials would be considered minimal and would not require these materials to be stored in bulk form. The project does not involve the use or storage of hazardous substances other than the insignificant amounts of pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping. The project must adhere to applicable zoning and fire regulations regarding the use and storage of any hazardous substances. Further, there is no evidence that the site has been used for underground storage of hazardous materials. Therefore, the proposed project will have less than significant impacts to 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?

Less Than Significant Impact: The proposed project is near a residential subdivision. There is no reasonably foreseeable condition or incident involving the project that could result in release of

hazardous materials into the environment, other than any potential accidental releases of standard fuels, solvents, or chemicals encountered during typical construction of a residential subdivision. Should an accidental hazardous release occur or should the project encounter hazardous soils, existing regulations for handling hazardous materials require coordination with the California Department of Toxic Substances Control for an appropriate plan of action, which can include studies or testing to determine the nature and extent of contamination, as well as handling and proper disposal. Therefore, potential impacts are considered to be *less than significant*.

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?

Less Than Significant Impact: The project is located approximately .9 miles from an existing middle school and borders a proposed elementary school. The project does not involve the use or storage of hazardous substances other than insignificant amounts of pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping. The project would not emit hazardous emissions or involve the handling of acutely hazardous materials or waste. Therefore, impacts would be *less than significant*.

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?

Less Than Significant Impact with Mitigation: The project site is not listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control (DTSC). However, the proposed project would develop residential units on a property previously and currently used for agriculture, and therefore is subject to DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision*). With incorporation of Mitigation Measure HAZ-1, potential impacts related to the presence and risk of residual organochlorinated pesticides would be reduced to *less than significant with mitigation*.

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 proposed project is not located within an airport land use plan and is not within two miles of a public airport. Mefford Field Airport is the nearest public airport to the project site and is located approximately 4.28 miles away. Implementation of the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. There is 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 City's site plan review procedures ensure compliance with emergency response and evacuation plans. In addition, the site plan will be reviewed by the Fire Department per standard City procedure to ensure consistency with emergency response and evacuation needs. Therefore, the proposed project would have *no impact* on emergency evacuation.

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

No Impact: The land surrounding the project site is developed with urban, suburban, and agricultural uses and are not considered to be wildlands. Additionally, the 2017 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan finds that fire hazards within the City of Tulare, including the proposed project site, have low frequency, limited extent, limited magnitude, and low significance. The proposed project would not expose people or structures to significant risk of loss, injury or death involving wildland fires and there is *no impact.*

Mitigation Measures for Impacts Related to Hazards and Hazardous Materials:

Mitigation Measure HAZ-1: Prior to the issuance of grading permits for ground clearance or excavation, the project proponent shall prepare a soils report and investigation for the presence of environmentally persistent pesticides, such as organochlorinated pesticides, in conjunction with the California Department of Toxic Substances Control (DTSC) and in accordance with DTSC's 2008 Interim Guidance for Sampling Agricultural Properties (Third Revision). The soils report shall:

A. Conduct soil samples and analyze for environmentally persistent pesticides such as organochlorinated pesticides, in conjunction with the California Department of Toxic Substances Control (DTSC), and in accordance with DTSC's 2008 Interim Guidance for Sampling Agricultural Properties (Third Revision).
B. Include a limited soil assessment and investigation for the presence of aerially deposited lead on the project site along North Mooney Boulevard and Morrison Street.
C. Conduct soil sampling and analysis in the inferred locations of any former buildings on the project site in accordance with the DTSC 2006 Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electric Transformers.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise sustainably 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 offsite?	☐	☐	☑	☐
(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 the release of pollutants due to project inundation?	☐	☐	☐	☑
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater movement plan?	☐	☐	☐	☑

Environmental Setting

Hydrologic System: The proposed project site is in the Tulare Lake Hydrologic Region, which covers 10.9 million acres south of the San Joaquin River. The proposed project site lies within the San Joaquin Valley Groundwater Basin. The San Joaquin Valley Groundwater Basin is divided into seven sub-basins. The proposed project site is located within the Kaweah Subbasin. The subbasin lies between the Kings Groundwater Subbasin on the north, the Tule Groundwater Subbasin on the south, the Tulare Lake subbasin on the west, and crystalline bedrock of the Sierra Nevada foothills on the east. The area is comprised mostly of lands in the Kaweah Delta Water Conservation District. Major rivers in the subbasin include the St. Johns and lower Kaweah Rivers, although the Kaweah River is considered the primary surface water source for groundwater recharge.

Groundwater: The City of Tulare consists of 23 active wells, a 125,000-gallon water storage tower, two - 2-million-gallon concrete storage tanks, one - 1.5-million-gallon concrete storage tank, 7 well sites with granulated activated carbon (GAC) treatment filters, 277 miles of water transmission and distribution

mains, and over 2,500 fire hydrants. The city's water supply comes from a series of deep groundwater wells scattered throughout the city and pumped into an interconnected water system. Additionally, the City of Tulare, City of Visalia, and the Tulare Irrigation District have joined a Joint Power Authority (JPA) Agreement to form the Mid-Kaweah Groundwater Sustainability Agency (GSA). The JPA states the Board of Directors is responsible for the development, adoption, and implementation of a Groundwater Sustainability Plan as required by the Sustainable Groundwater Management Act of 2014. There is an existing City well that borders the project site.

Surface Waters: None of the City's potable water is supplied through surface water. However, the City of Tulare does purchase surface water from the Tulare Irrigation District to be used for groundwater recharge.

Regulatory Setting

Clean Water Act: The Clean Water Act (CWA) is enforced by the U.S. EPA and was developed in 1972 to regulate discharges of pollutants into the waters of the United States. The Act made it unlawful to discharge any pollutant from a point source into navigable waters unless a National Pollution Discharge Elimination System (NPDES) Permit is obtained.

Central Valley RWQCB: The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB requires a National Pollution Discharge Elimination System (NPDES) Permit and Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a NPDES Permit and SWPPP will be required.

City of Tulare General Plan: The City of Tulare General Plan contains the following goals and policies related to water resources:

- LU-P11.3 System Expansion. The City shall require new development be responsible for expansion of existing facilities such as water systems, sewer systems, storm drainage systems, parks and other capital facilities made necessary to serve the new development.
- LU-P11.4 Water Supply System. The City shall require that water supply systems be adequate to serve the size and configuration of land developments. Standards as set forth in the subdivision ordinance shall be maintained and improved as necessary.
- LU-P11.5 Water Supply for New Development. For all new development, prior to the approval of any subdivision applications, the developers shall assure that there is sufficient available water supply to meet projected buildout.
- LU-P11.6 Adequate System Maintenance. The City shall require maintenance funding for streets, storm drainage, and ponding basins for new development.
- LU-P11.7 Adequate Infrastructure Capacity. The City shall only approve new development when it can be demonstrated by the applicant that adequate system capacity in the service area is or will be available to handle increases related to the project.
- LU-P11.9 Adequate City Service Capacity. The City shall only approve new development when it can be demonstrated by the applicant that adequate public service capacity in the area is or will be available to handle increases related to the project. School capacity will be discussed in the review of each development, and the City will ensure early coordination with the school districts serving the site. School capacity will be addressed as allowed under State law.

- LU-P11.17 Fair Share Improvements. The City shall ensure new development is required to participate on a fair-share basis in the completion of improvements to the existing sewer system, and/or the construction of new sewer trunk lines as described in the City's adopted Sewer Master Plan.
- COS-P1.1 Regional Groundwater Protection. The City shall work with Tulare County and special districts to help protect groundwater resources from overdraft by promoting water conservation and groundwater recharge efforts.
- COS-P1.8 Water Conservation. The City shall promote efficient water use and reduced water demand by:
  a. Requiring water-conserving design and equipment in new construction.
  b. Encouraging water-conserving landscaping and other conservation measures; and
  c. Encourage retrofitting existing development with water conserving devices.
  d. Providing public education programs.
  e. Distributing outdoor lawn watering guidelines.
  f. Promoting water audit and leak detection programs.
  g. Enforcing water conservation programs.
- COS-P1.11 Water for Irrigation. Whenever possible, the City shall require new development to use recycled or non-potable water for irrigation in landscaped areas.

Discussion

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 with Mitigation: The project will result in less than significant impacts to water quality due to potentially polluted runoff generated during construction activities. Construction would include excavation, grading, and other earthwork that may occur across most of the 25.9-acre project site. During storm events, exposed construction areas across the project site may cause runoff to carry pollutants, such as chemicals, oils, sediment, and debris. In addition, soil erosion may result Implementation of a Stormwater Pollution Prevention Plan (SWPPP) will be required for the project. A SWPPP identifies all potential sources of pollution that could affect stormwater discharges from the project site and identifies best management practices (BMPs) related to stormwater runoff. There may be chemicals or surfactants used during project maintenance or operations, so discharge could impact water quality standards. Therefore, the impacts are *less than significant with mitigation.*

Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit.

- Prior to issuance of grading permits for Phase 1 the Applicant shall submit a copy of the NOI to the City.
- The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the site during construction for compliance.

Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and

instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to:

- Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust;
- A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures;
- Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used;
- Soil stockpiles and graded slopes will be covered after two weeks of inactivity and 24 hours prior to and during extreme weather conditions; and,
- BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc.

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: Water services will be provided by the City of Tulare upon development. The City's water supply source is comprised of 23 wells that extract water from an underground aquifer. According to City's Urban Water Management Plan (2015), the projected water supply for Tulare in year 2025 is 12,968.1 million gallons, which is comprised of both groundwater and recycled water.

The 25.9-acre project site uses approximately 75-acre feet of water per year (Sacramento Valley Land Use/Water Supply Analysis Handbook, 2007). Using average per-person water use in the State of California (85 gallons; California Legislative Analyst's Office, 2017) and the average household size in the City of Tulare (3.43 persons; US Census Bureau), water demand for the proposed 88-unit residential development is estimated to be approximately 25,656.4 gallons of water daily, or 28.7 acre-feet per year. This would be a reduction in water demand for the project site from existing conditions, therefore the project would not decrease groundwater supply from existing conditions.

The proposed project would involve a General Plan amendment to change 7 acres of the Project site from Low Density Residential to Small Lot Residential, and a General Plan amendment to change 18 acres of the Project site from Rural Residential to Single Family Residential. Therefore, it is relevant to consider the change in water use associated with the change in general plan land use. The 7 acres of Low Density Residential and 18 acres of Rural Residential would use approximately 61-acre feet of water per year (Sacramento Valley Land Use/Water Supply Analysis Handbook, 2007). Therefore, the proposed project would not increase water demand beyond what would have occurred if the site had been developed for the existing general plan use.

The project would result in reduced percolation to the groundwater basin due to an increase in the amount of paved and impervious surfaces. However, all stormwaters will be redirected to a retention basin for groundwater recharge that borders the project site. The project would expand this basin.

The project has been reviewed by the City of Tulare Public Works Director and Engineer who have determined that the Project will not have a significant impact on the existing water system. The project would have a *less than significant impact* on groundwater resources.

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?

Less than Significant Impact: The proposed project includes the construction and operation of 88 low-density residential units on approximately 25.9 gross acres. The construction of these units may be considered an alteration in drainage patterns; however, this would not result in substantial erosion or siltation on- or off-site. A Stormwater Pollution Prevention Plan (SWPPP) will be implemented during project construction. SWPPPs include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction. The impact is *less than significant.*

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant Impact: Because the project would result in an increase of impervious surfaces within the project site, an increase in surface runoff may occur. However, the project is near a proposed stormwater retention basin and all stormwater runoffs will be contained in this basin. The project has been reviewed by the City of Tulare Public Works Director and the City's Engineer who have determined that the implementation of the proposed Project will not result in substantial flooding on- or off-site. The project will have a *less than significant impact.*

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?

Less than Significant with Mitigation: The proposed project would include the construction and operation of 88 low-density residential units on approximately 25.9 gross acres of agricultural land. Existing agricultural operations consist of plowing of the soil and using fertilizers and pesticides. These activities contribute to polluted runoff, however most of the agricultural runoff is naturally cleaned through soil percolation. Replacing agricultural uses with urban residential uses would change the quality and volume of runoff with the addition of oil, grease, and other urban pollutants. New impervious surfaces, such as the roads and driveways, collect automobile derived pollutants such as oils, greases, rubber and heavy metals. During storms, pollutants would be transported into the drainage systems by surface runoff. Due to the increase in population and impervious surfaces within the site, there would be an increase in pollutants in surface runoff. As a result, an increase in point source and non-point source pollution may result from increases in urban development. The project is not a source which would otherwise create substantial degradation of water quality. Upon compliance with the City's SWMP, Engineering Standards, General Plan, and City Ordinance requirements, as well as mitigation measures, impacts related to water quality would be *less than significant with mitigation incorporation.*

Mitigation Measure HYD-3: A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP devices be inspected, cleaned and maintained in accordance with the manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following:

- Runoff shall be directed away from trash and loading dock areas;
- Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes;
- Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and,
- Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system.

iv. Impede or redirect flood flows?

No Impact: The Project site is generally flat and no significant grading or leveling will be required. The proposed project site is not in proximity to a stream or river and will not alter the course of a stream or river. According to National Flood Hazard mapping by the Federal Emergency Management Agency, the proposed project site is not located within a 100-year flood hazard area. There would be *no impact* with regard to impeding or redirecting flood flows.

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

No Impact: The proposed project is located inland and not near an ocean or large body of water, and therefore, would not be affected by a tsunami. The proposed project is located in a relatively flat area and would not be impacted by inundation related to mudflow. Since the project is located in an area that is not susceptible to inundation, the project would not risk release of pollutants due to project inundation. As such, there is *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 proposed project will not conflict with or obstruct implementation of a water quality control plan. The proposed project will be subject to the requirements of the NPDES Stormwater Program and will be required to comply with a SWPPP, which will identify all potential sources of pollution that could affect stormwater discharges from the project site and identify BMPs to prevent significant impacts related to stormwater runoff.

The proposed project site is within the jurisdiction of the Mid-Kaweah Groundwater Sustainability Agency (GSA). The Groundwater Sustainability Plan (GSP) was adopted by the Mid-Kaweah GSA in December 2019. The plan was reviewed for consistency with the proposed project, and it was

determined that the proposed project does not conflict with and would not obstruct implementation of the GSP. There is *no impact.*

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?	☐	☐	☐	☑

Environmental Setting

The proposed project site is located with the northeastern portion of the City of Tulare. Under the City of Tulare General Plan, approximately 7 acres of the project site are designated Low Density Residential, and 18 acres are designated Rural Residential. 7 acres of the proposed project site are zoned R-1-6, and 18 acres are zoned R-1-20. The project would rezone the project site from R-1-6 to R-1-4, and R-1-20 to R-1-5. The project requires a General Plan amendment and Conditional Use Permit to change the land use designation of the Low-Density Residential portion of the project to Small Lot Residential, and a General Plan amendment to change the land use designation of the Rural Residential portion of the Project to Single Family Residential.

Regulatory Setting

City of Tulare General Plan: Approximately 7 acres of the project site are designated Low Density Residential, and 18 acres are designated Rural Residential under the City of Tulare General Plan. The project would re-designate the Low Density Residential to Small Lot Residential, and the Rural Residential portion of the project to Single Family Residential. These land designations establish areas for single-family dwellings located near neighborhood serving uses. The Small Lot Residential provides compact development of Single-Family housing. This designation typically has a density range at 6-8 DU/acre with a lot size between 3,200 and 4,000 square feet. The Single-Family Residential land use mainly provides low-density, Single-Family housing. This designation has a density range of 3.1-7.0 DU/acre with a minimum lot size of 5,000 square feet.

The following goals and policies in the City of Tulare General Plan are applicable to the project site's residential land use designation:

Goal LU-3 To designate, protect, and provide land to ensure sufficient residential development capacity and variety to meet community needs and projected population growth.

- LU-P3.1 Neighborhood Housing Mix. The City shall encourage mixed use neighborhoods to have a variety of housing types and densities to help create an overall healthy, balanced community.
- LU-P3.4 Jobs-Housing Balance. The City shall consider the effects of city land use proposals and decisions on the Tulare County area and the efforts to maintain a regional jobs housing balance.

- LU-P3.5 Future Residential Development. The City shall direct future residential development to areas adjacent or in close proximity to existing and future neighborhoods and neighborhood commercial areas to further Tulare as a self-sufficient, full-service city.
- LU-P3.6 High Density Residential Locations. The City shall encourage the development of higher density housing including near commercial services, employment centers, principal arterial routes, and public transportation.
- LU-P3.8 Incompatible Uses. The City shall protect existing residential neighborhoods from the encroachment of incompatible activities and land uses (i.e. traffic, noise, odors, or fumes) and environmental hazards (i.e. flood, soil instability).
- LU-P3.9 Planned Development. The City shall encourage the use of planned development provisions in residential developments to provide flexibility, to meet various socio-economic needs, and to address environmental and site design constraints.

City of Tulare Code of Ordinances Chapter 10.33: As part of the proposed project, part of the Project site would be re-zoned to R-1-4. The purpose of the Small Lot Residential District (R-1-4) is to provide living areas within the City where development is proposed to achieve compact development with lot sizes in the range of 3,200 sq.ft. to 4,000 sq.ft.

City of Tulare Code of Ordinances Chapter 10.32: Additionally, part of the project site will be re-zoned to R-1-5. The purpose of the Single-Family Residential (R-1) Districts are to provide living areas within the city where development is limited to low density concentrations of one-family dwellings. The R-1-5 designation requires a minimum lot size of 5,000 sq.ft.

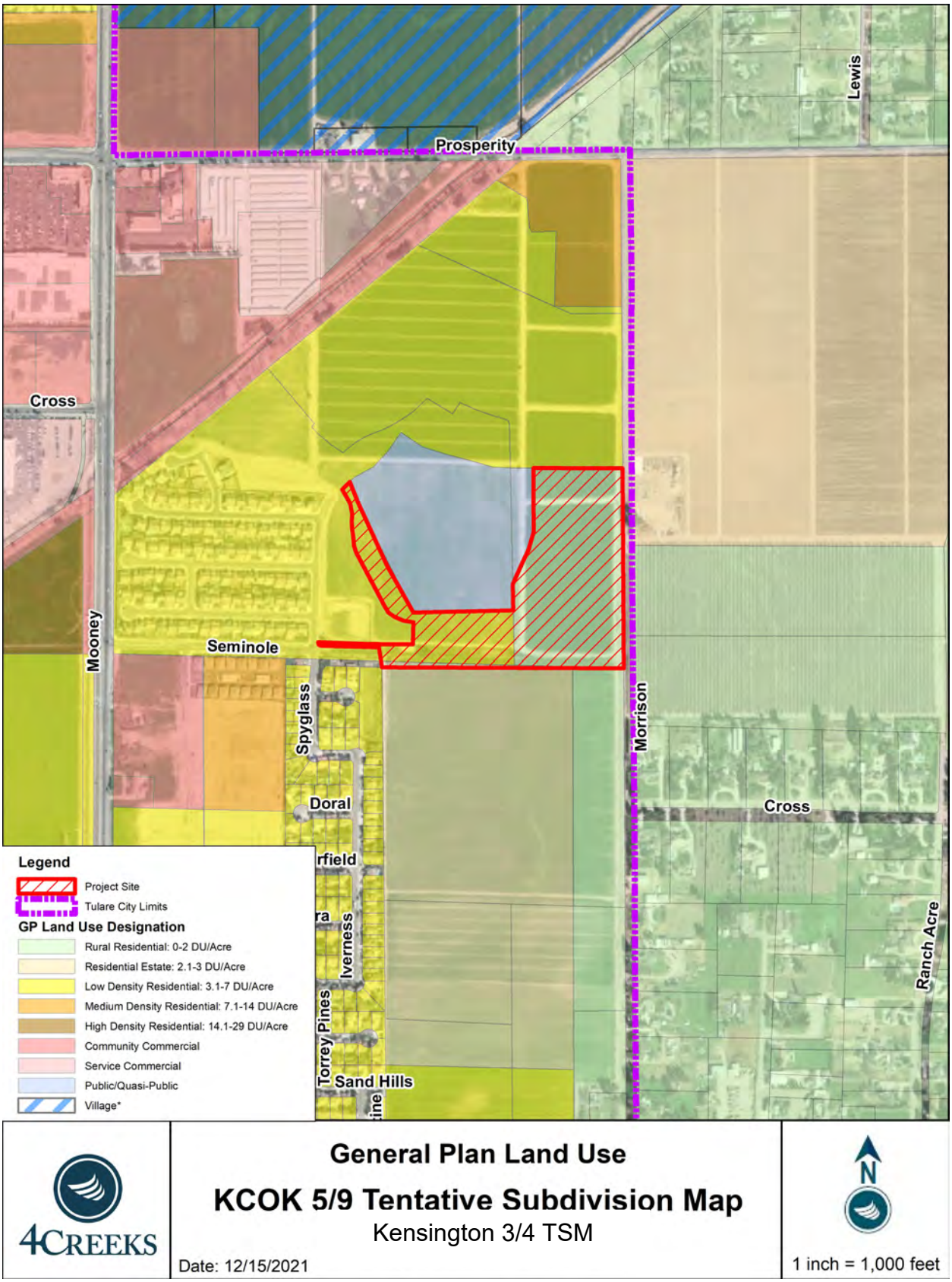


Figure 3-6: 2035 General Plan Land Use

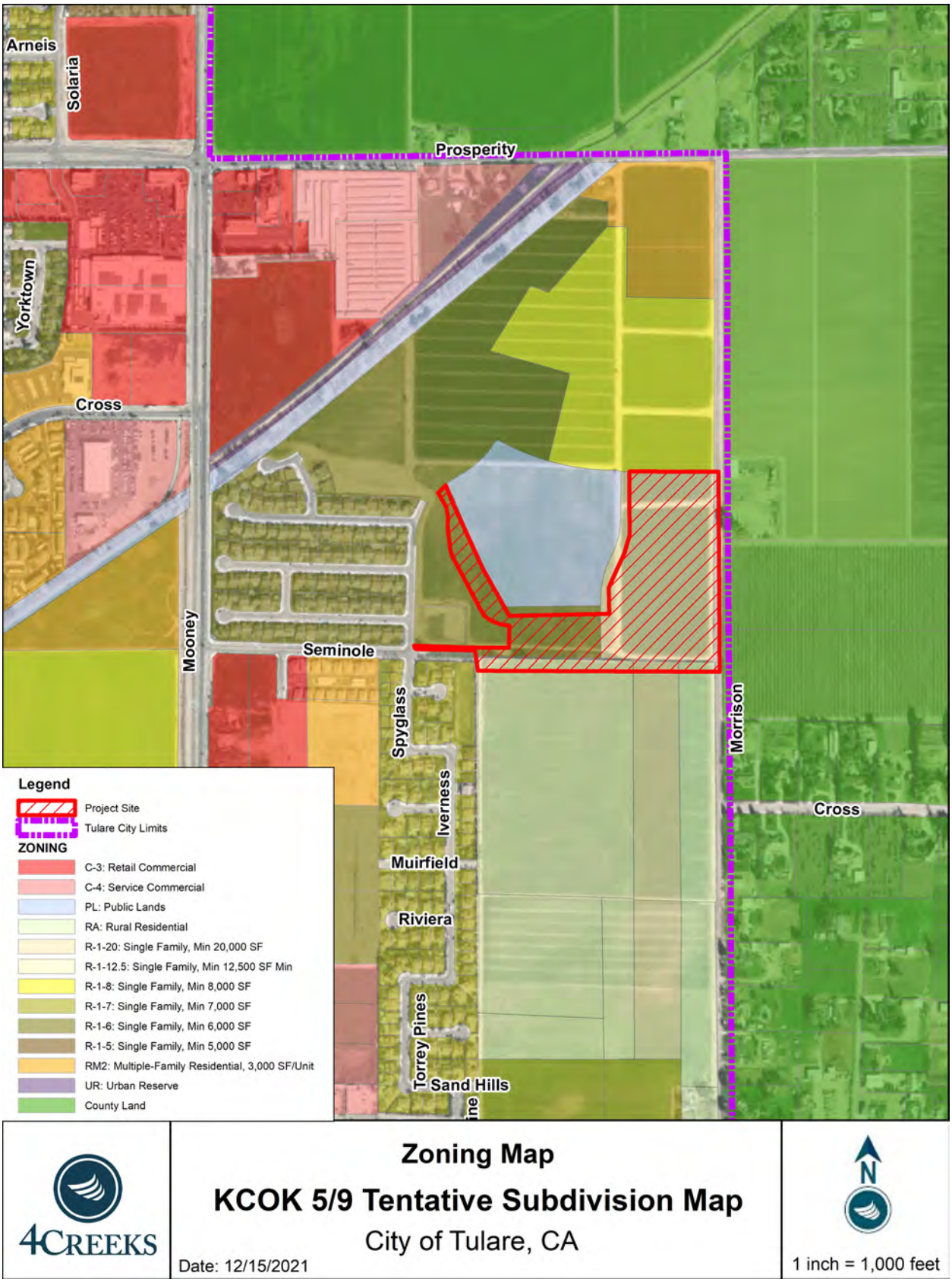


Figure 3-7: Zoning Map

Discussion

a) Would the project physically divide an established community?

No Impact: The project proposes the development of 88 low-density residential units on approximately 25.9 gross acres within the northeastern area of the City of Tulare. The project would not function as a physical barrier within a community. There is *no impact.*

b) Would the project 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?

No Impact: The proposed project does not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There is *no impact.*

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 lands use plan?	☐	☐	☐	☑

Environmental Setting

There are no mineral resource zones in Tulare County and there is no mineral extraction occurring on or adjacent to the proposed project site. Historical mines within the County include mineral deposits of tungsten, copper, gold, magnesium and lead, however most of these mines are now closed – leaving only 37 active mining operations. There are no active mining operations within the City of Tulare.

Regulatory Setting

California State Surface Mining and Reclamation Act: The California State Surface Mining and Reclamation Act was adopted in 1975 to regulate surface mining to prevent adverse environmental impacts and to preserve the state's mineral resources. The Act is enforced by the California Department of Conservation's Division of Mine Reclamation.

City of Tulare General Plan: The following mineral resource goals and policies in the Conservation and Open Space Element of the Tulare County General Plan are potentially applicable to the proposed project:

Goal COS-8 To protect the current and future extraction of mineral resources that are important to the City's economy while minimizing impacts of this use on the public and the environment.

- COS-P8.3 Future Resource Development. Provide for the conservation of identified and/or potential mineral deposits within the UDB as areas for future resource development.
- COS-P8.5 Incompatible Development. Proposed incompatible land uses shall not be on lands containing, or adjacent to, identified mineral deposits or along key access roads, unless adequate mitigation measures are adopted or a statement of overriding considerations stating public benefits and overriding reasons for permitting the proposed use are adopted.
- COS-P8.10 Resources Development. The City will promote the responsible development of identified and/or potential mineral deposits.

Discussion

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 has no known mineral resources that would be of a value to the region and the residents of the state, therefore the proposed project would not result in the loss of impede the mining of regionally or locally important mineral resources. There is *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 lands use plan?

No Impact: There are no known mineral resources of importance to the region and the project site is not designated under the City's or County's General Plan as an important mineral resource recovery site. For that reason, the proposed project would not result in the loss of availability of known regionally or locally important mineral resources. There is *no impact.*

XIII. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permeant 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 groundborne 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 public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Environmental Setting

Noise is often described as unwanted sound. Sound is the variation in air pressure that the human ear can detect. If the pressure variations occur at least 20 times per second, they can be detected by the human ear. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Ambient noise is the "background" noise of an environment. Ambient noise levels on the proposed project site are primarily due to agricultural activities and traffic. Construction activities usually result in an increase in sound above ambient noise levels.

Regulatory Setting

City of Tulare General Plan: The Noise Element of the City of Tulare General Plan is responsible for establishing noise standards within the City and includes the following goals and policies related to noise that may be applicable to the project.

Goal NOI-1 Protect the citizens of Tulare County from the harmful effects of exposure to excessive noise.

- NOI-P1.5 Construction Noise. Reduce noise associated with construction activities by requiring properly maintained mufflers on construction vehicles, requiring the placement of stationary construction equipment as far as possible from developed areas, and requiring temporary acoustical barriers/shielding to minimize construction noise impacts at adjacent receptors. Special attention should be paid to noise-sensitive receptors (including residential, hospital, school, and religious land uses).

- NOI-P1.6 Limiting Construction Activities. The City shall limit construction activities to the hours of 6 am to 10 pm, Monday through Saturday.
- NOI-P1.18 Construction-related Vibration. Evaluate individual projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses, additional requirements, such as use of less-vibration-intensive equipment or construction techniques, should be implemented during construction (e.g., drilled piles to eliminate use of vibration-intensive pile driver).

Discussion

a) Would the project result in generation of a substantial temporary or permeant 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: Project construction is anticipated to last approximately 30 months and will involve temporary noise sources. The average noise levels generated by construction equipment that will be used in the proposed project are shown below.

Type of Equipment	dBA at 50 feet
Air Compressors	81
Excavators	81
Concrete/Industrial Saws	76
Cranes	83
Forklifts	75
Generators	81
Pavers	89
Rollers	74
Dozers	85
Tractors	84
Loaders	85
Backhoes	80
Graders	85
Scrapers	89
Welders	74

Table 3-9. Noise levels of noise-generating construction equipment. Source: Federal Highway Administration Construction Noise Handbook.

The City of Tulare General Plan and Noise Ordinance does not identify noise thresholds for noise sources related to construction, however the General Plan does require the implementation of noise reduction measures for all construction equipment and limits noise generating activities related to construction to daytime hours Monday through Saturday. The project will comply with these regulations and construction will only occur Monday through Saturday between 6:00 AM and 10:00 PM.

Long term noise levels resulting from the project would include single-family homes, which are not normally associated with high operational noise levels.

Because noise generated from construction would be temporary, construction activities would comply with all measures established by the City to limit construction related noise impacts, and operational noise would be consistent with adjacent land uses, the impact is *less than significant.*

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

No Impact: The City of Tulare General Plan states that projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors must be evaluated for potential vibration. Because the proposed project would not use this type of equipment, the project would not generate excessive ground-borne vibration or ground-borne noise levels and there is *no impact.*

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 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 site is not located in an airport land use plan. Mefford Field is the nearest public airport and is located approximately 4.28 miles away from the proposed project site. There is *no impact*.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by 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?	☐	☐	☐	☑

Environmental Setting

The United States Census Bureau reported the population in the City of Tulare to be 68,875 in 2020. This is an increase from the 2010 census, which counted the population in the City of Tulare to be 59,275. Factors that influence population growth include job availability, housing availability, and the capacity of existing infrastructure.

Regulatory Setting

The size of the population in the City of Tulare is controlled by the development code and Land Use Element of the General Plan. These documents regulate the number of dwelling units per acre allowed on various land uses and establish minimum and maximum lot sizes. These factors have a direct impact on the City's population size.

Discussion

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

Less than Significant Impact: The United States Census Bureau estimated the population in the City of Tulare to be 68,875 in 2020. The project proposes to construct 88 new low-density residential units. The Census states that the City's average household size is 3.43 persons. Based on this average household size, the anticipated population increase as a result of the proposed project is 302 persons. This would be a 0.4% population increase beyond existing conditions. The construction of housing at this location would not be unplanned, as the City's General Plan designated the proposed project site for Rural Residential and Low Density Residential. Overall, this will not constitute a substantial increase in growth and population. The impact is *less than significant.*

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

No Impact: There project does not involve the removal of existing residences and would not displace any people. There is *no impact.*

XV. PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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 serve ratios, response times of other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☑	☐
b. Police protection?	☐	☐	☑	☐
c. Schools?	☐	☐	☑	☐
d. Parks?	☐	☐	☑	☐
e. Other public facilities?	☐	☐	☑	☐

Environmental Setting

Fire: The project site is served by the City of Tulare Fire Department. The City of Tulare Fire Department will continue to provide fire protection services to the proposed project site upon development. The nearest fire station is located approximately 1.8 miles southwest of the proposed project site.

Police: Law enforcement services are provided to the project site via the Tulare Police Department. The City of Tulare will continue to provide police protection services to the proposed project site upon development. Tulare Police Department is located approximately 2.1 miles southwest of the proposed project site.

Schools: The proposed project site is located within the Tulare School District. The nearest school, Live Oak Middle School, is located .87 miles west of the project site. In addition, a proposed elementary school would border the project site.

Regulatory Setting

School Districts in the City of Tulare are regulated by the California Department of Education, and the Tulare Police Department is regulated by the California Department of Justice. Objectives and Policies relating to Law Enforcement, Fire Protection, Parkland, and School Facilities are included in the Land Use Element and Conservation and Open Space Element of the Tulare's General Plan. The Goals and Policies potentially applicable to the proposed project are as follows:

- COS-P4.1 Parkland/Open Space Standards: The City's goal is to provide 4 acres of developed parkland per 1,000 residents. New residential or mixed-use developments containing a residential

component may be required to provide parkland, or pay in-lieu fees, in this ratio as directed by the City.

- LU-P11.3 System Expansion: The City shall require new development be responsible for expansion of existing facilities such as water systems, sewer systems, storm drainage systems, parks, and other capital facilities made necessary to serve the new development.
- LU-P11.9: Adequate City Service Capacity: The City shall only approve new development when it can be demonstrated by the applicant that adequate public service capacity in the area is or will be available to handle increases related to the project. School capacity will be discussed in the review of each development, and the City will ensure early coordination with the school districts serving the site. School capacity will be addressed as allowed under State law.
- LU-P11.26 Evaluate Fiscal Impacts: The City shall evaluate the fiscal impacts of new development and encourage a pattern of development that allows the City to provide and maintain a high level of urban services (including, but not limited to, water, sewer, transportation, fire stations, police stations, libraries, administrative, and parks), and community facilities and utility infrastructure, as well as attract targeted businesses and a stable labor force.

Discussion

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 serve ratios, response times of other performance objectives for any of the public services:

a. Fire protection?

Less Than Significant Impact: The City of Tulare Fire Department will provide fire protection services to the proposed development. The closest fire station is Tulare Fire Station #61, located 1.8 miles Southwest of the project site at 800 S Blackstone Street. The addition of 88 residential units will increase the demand for fire protection services. According to Tulare's Municipal Service Review (2013), the Tulare Fire Department currently has a deficit of 32 firefighters, 1 fire station, and 4 aerial ladders. However, the shortage as well as the increase in service demand will be compensated by the development impact fee of $246 per dwelling unit, which is consistent with City Resolution Number 03-4988. Therefore, the total development fee would be $21,648. The development impact fee of $246 per dwelling unit is assumed to account for fire protection deficits.

The timing of when new fire service facilities would be required or details about size and location cannot be known until such facilities are planned and proposed, and any attempt to analyze impacts to a potential future facility would be speculative. As new or expanded fire service facilities become necessary, construction or expansion projects would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant.*

b. Police protection?

Less than Significant Impact: The Tulare Police Department will provide services to the proposed development. The Tulare Police Department is located approximately 2.1 miles southwest of the proposed project site. The development would increase the demand for police service with the

addition of 88 residential units. According to Tulare's Municipal Service Review (2013), the Tulare Police Department currently has a deficit of 37 sworn officers, 22 non-sworn officers, 28 vehicles, and 8,645 SF in police station space. The shortage and the additional demand will be compensated by the development impact fee of $38 per dwelling unit, which is consistent with City Resolution Number 03-4988. The total development impact fee for police services would be $3,344.

The timing of when new police service facilities would be required or details about size and location cannot be known until such facilities are planned and proposed, and any attempt to analyze impacts to a potential future facility would be speculative. As new or expanded police service facilities become necessary, construction or expansion projects would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant*.

c. Schools?

Less than Significant Impact: The proposed project is within the Tulare City Elementary School District and Tulare Joint Union High School District. Since the proposed project includes the addition of 88 single-family residential units, the number of students in the school district will increase. The proposed project site is located within the city limits and approved Urban Development Boundary (UDB) per the City's General Plan, and therefore, growth associated with the Project has been planned and expected. An Elementary school on the border of the project site is proposed in anticipation of growth in this part of the city, including the area of this proposed project. In addition to the goals and policies of the City's General Plan, future development is required by state law to pay development impact fees to the school districts at the time of building permit issuance. These impact fees are used by the school districts to maintain existing and develop new facilities, as needed. Therefore, the impact is *less than significant.*

d. Parks?

Less than Significant Impact: The addition of 88 new residential units would result in more use at existing parks. Parks within a half-mile to one-mile radius that would service the proposed development include Live Oak Park. The project also borders a proposed 2.65-acre park. The City's 2035 General Plan Policy states that new residential development may be required to provide additional parkland or in-lieu fees. Therefore, the developer shall pay a development impact fee of $3,129 per dwelling unit, which is consistent with Policy COS-P4.1 of the General Plan. The total development impact fee for park services would be $275,325. Since the project would not lower the existing level of services for parks, pay in-lieu fees, and provide park space, the impact is *less than significant.*

e. Other public facilities?

Less than Significant Impact: Water and wastewater services for the proposed development would be serviced by existing infrastructure beneath neighboring streets. The additional 88 residential units will increase the demand for water and wastewater facilities. According to Tulare's 2035 General Plan Land Use Element, the City states that new development must be responsible for expanding existing water and sewage systems. Therefore, the developer shall pay the required development impact fees to accommodate the expansion of existing systems. The development impact fees for water facilities, groundwater recharge, sewer facilities, and storm

water facilities are $3,030 per dwelling unit, $517 per dwelling unit, $2,860 per dwelling unit, and $1,438 per dwelling unit, respectively. General city facilities fees of $375 per dwelling unit will also compensate for the increased demand for public facilities and services. For 88 new dwelling units, this will total $723,360 Therefore, the impact is *less than significant.*

XVI. PARKS AND RECREATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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?	☐	☐	☑	☐
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?	☐	☐	☑	☐

Environmental Setting

There are 20 parks that are owned and operated by The City of Tulare. Live Oak Park is the closest recreational area to the project site and is located approximately 0.6 miles West of the project site.

Regulatory Setting

City of Tulare General Plan: The Conservation and Open Space Element of the City of Tulare General Plan contains the following recreational resource goals and policies potentially applicable to the project.

Goal COS-4 To provide parks and recreation facilities and services that adequately meet the existing and future needs of all Tulare residents.

- COS-P4.1 Parkland/Open Space Standards. The City's goal is to provide 4 acres of developed parkland per 1,000 residents. New residential or mixed-use developments containing a residential component may be required to provide parkland, or pay in-lieu fees, in this ratio as directed by the City.
- COS-P4.5 Fair Share Responsibilities. The City shall ensure all future residential development is responsible for its fair share of the City's cumulative park and recreational service and facilities maintenance needs.
- COS-P4.6 Land Dedication. The City shall continue its practice of requiring the dedication of community and neighborhood park lands as a condition of approval for large residential development projects (50 or more lots), if applicable.
- COS-P4.7 Fees In Lieu of Parkland Dedication. The City shall allow the payment of fees in lieu of parkland dedication, especially in areas where dedication is not feasible, as provided under the Quimby Act.

Discussion

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: Implementation of the proposed project would result in increased use of existing parks and other recreational facilities; however, the project would contribute its fair share to parks facilities through in-lieu fees, which will be used to support the maintenance of existing parks and other recreational facilities. The impact is *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: The project would be constructed next to a proposed 2.75-acre park. The proposed park is located on the border of the development area and would not increase environmental impacts beyond those associated with the proposed project. The impact is *less than significant.*

XVII. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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 the 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?	☐	☐	☑	☐

Discussion for this section originates from the VMT Assessment that was prepared for this project by JLB Traffic Engineering. The full VMT Assessment document can be found in Appendix D of this Initial Study.

Environmental Setting

Vehicular Access: Vehicular access to the project is available from Morrison Street and Seminole Avenue. The City of Tulare is the primary authority for major arterial and local streets. Other transportation facilities include Spyglass Street, which bounds the west side of the property and a network of local roads within the proposed project site property. These provide full access to the single-family homes within the development.

Parking: During construction, workers will utilize existing facility parking areas and/or temporary construction staging areas for parking of vehicles and equipment. During project operations, there will be no permanent personnel on-site and no additional parking facilities will be required.

Pedestrian and Cyclist Connectivity: The project will install sidewalks along the north side of Seminole Avenue, the west side of Morrison Street, and on all internal streets within the project area. Proposed sidewalks on Seminole Avenue will connect to existing sidewalks to the west. Sidewalks along internal residential streets (labeled Bay Hill Circle and Quail Hollow Street on the tentative subdivision map shown in Figure 3-2) will connect to existing and future sidewalks to the west and north, respectively. These features will provide connectivity for pedestrians and cyclists within the project area and offsite.

Regulatory Setting

City of Tulare Improvement Standards: The City of Tulare's Improvement Standards are developed and enforced by the City of Tulare's Engineering Division to guide the development and maintenance of City Roads. The cross-section drawings contained in the City Improvement Standards dictate the development of roads within the City.

Tulare City General Plan: The Transportation and Circulation Element of the City of Tulare General Plan contains the acceptable Level of Service (LOS) for roadways.

- TR-P2.3 Level of Service Standard**.** The City shall maintain Level of Service "D," as defined in the Highway Capacity Manual (published by the Transportation Research Board of the National Research Council), as the minimum desirable service level at which freeways, arterial streets, collector streets, and their intersections should operate.
- TR-P2.6 Highway Right-of-Way**.** The City shall work with Caltrans to ensure that new development projects include the dedication of land to match the ultimate right-of-way as delineated in the Caltrans Transportation Concept Reports.
- TR-P2.10 Roadway Improvements**.** The City shall improve existing roadway links and intersections which are identified as operating below Level of Service "D" standard or have other significant existing safety or operational deficiencies.
- TR-P2.14 Driveway/Curb Cut Consolidation**.** The City shall encourage the consolidation of driveways, access points, and curb cuts along existing developed major arterials or arterials when new development or a change in the intensity of existing development or land uses occurs or when traffic operation or safety warrants.
- TR-P2.27 Orientation of Subdivision Away from Arterials**.** The City shall require residential development to be oriented away (side-on or rear-on) from major arterials and arterials, and properly buffered from these roadway types to preserve the carrying capacity on the street and protect the residential environment. No single-family residence driveways are allowed on collector streets.
- TR-P6.2 Provision of Sidewalks for new Development**.** The City shall require all new development to provide sidewalks or other suitable pedestrian facilities. Whenever feasible, pedestrian paths should be developed to allow for unobstructed pedestrian flow to major destinations such as bus stops, schools, parks, and shopping centers.

Discussion

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

No Impact: The project consists of the construction of 88 low-density residential units, as well as on-site circulation-related infrastructure improvements, including new local residential streets. The proposed project would include the signalization of the Morrison Street/Tulare Avenue intersection. This improvement, along with other improvements occurring as part of other pending and approved projects in the study area, would allow the intersections to operate at levels of service that meet the City of Tulare's General Plan (Policy TR-P2.3) target level of service (LOS) D or better. The proposed project would also include frontage improvements, including curb, gutter, and sidewalks, which would be an improvement to pedestrian accessibility over existing conditions. All improvements, including those related to transit, roadway, bicycle, and pedestrian facilities, are subject to City review and approval to ensure compliance with all plans, ordinances, and policies related to circulation. The proposed project will not conflict with the City's circulation plan and standards. Therefore, there is *no impact.*

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?

Less than Significant Impact: Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as VMT instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities are no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 26, 2020, the City of Tulare prepared a memo titled Proposed Process and Thresholds for Assessing Vehicle Miles Traveled for Development Projects Starting July 1, 2020 which summarized VMT and provided a recommendation for the City to "use map-based screening for residential and office/industrial projects with travel forecasting data from Tulare County Association of Governments (TCAG) and apply the recommendations for VMT thresholds." The City of Tulare recommended VMT Guidelines were prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7.

The City of Tulare VMT Guidelines adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis. These criteria may be size, location, proximity to transit or trip making potential. In general, development projects that meet one or more of the following criteria can be screened out from a quantitative VMT analysis.

1. Projects that generate fewer than 110 trips per day
2. Projects within a ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor
3. Affordable housing projects in infill locations
4. Locally serving retail
5. Transit projects, bike projects, pedestrian enhancements, livability enhancements, and street safety improvement projects.
6. Map-based screening – Residential and office projects can be considered to result in less than significant impacts on VMT if they are located within low VMT areas on a map or maps generated for cities or regions using VMT data modeling.

This screening tool is consistent with the OPR December 2018 Guidance referenced above. Figure 1 in Appendix A shows the existing average VMT by traffic analysis zones (TAZs) in TCAG's regional model. The County average trip distance in miles traveled is 11.48 miles. The screening tool includes a map of the City of Tulare with several different colored areas. "Areas shown in green are areas with average trip distance in miles below 9.76 miles, representing the 15% reduction from the regional average of 11.48 miles. TAZs shown in yellow/maize represent areas in the City below the regional average, but not meeting the 15% reduction target from the regional average. TAZs shown in red represent areas in the City where the average trip distance is higher than the regional average. This map can be used as a screening threshold for residential and office/industrial to show areas that are already achieving the thresholds indicated in Table 1 [shown in Appendix A]. Generally, if a project is located in the areas shown in green, it is likely meeting the thresholds in Table 1, unless there are specific project characteristics that would result in an overall increase in VMT, rather than redistribution of vehicle trips. Ultimately, the thresholds in Table 1 should be used to guide the type of analysis required, depending on the project type."

For projects that are not screened out, a quantitative analysis of VMT impacts must be prepared and compared against the recommended VMT thresholds of significance. The City of Tulare recommended VMT Guidelines memo includes thresholds of significance for development projects, transportation projects and land use plans. These thresholds of significance were developed using the County of Tulare as the applicable region, and the required reduction of VMT (as recommended in the City of Tulare VMT Guidelines memo) corresponds to Tulare County's contribution to the statewide GHG emission reduction target. In order to reach the statewide GHG reduction target of 15%, Tulare County must reduce its GHG emissions by 15%. The method of reducing GHG by 15% is to reduce VMT by 15% as well.

As the Project type is General Residential it can utilize Table 1 of the City's VMT screening criteria to determine if the project can be assumed to have less than significant VMT impacts and as a result be screened out from a quantitative VMT analysis. Per Table 1 of the City's VMT screening criteria, General Residential projects which are located within a green area of Figure 1 (prepared by the Tulare County Association of Governments (TCAG)) are presumed to have less than significant impacts to VMT and therefore can be screened out of a quantitative VMT analysis. As shown in Figure 1, the proposed Project is located within the green area with an average distance of 9.48 miles. As a result, the Project can be screened out of a quantitative VMT Analysis based on the map-based screening criteria. The impact is considered *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 proposed project does not include any features that could result in increased hazards due to a geometric design feature. All proposed road designs will be reviewed and approved by the City of Tulare Engineering department. There is *no impact.*

d) Would the project result in inadequate emergency access?

Less Than Significant Impact: This project would not result in inadequate emergency access. Emergency access to the site would be via Morrison Street and Seminole Avenue. A network of local roads within the proposed project property provides full access onto and off of the project site. Any impacts related to emergency access would be *less than significant.*

XVIII. TRIBAL CULTURAL RESOURCES

Would the project: 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:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☑	☐	☐
b) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☑	☐	☐

Environmental Setting

Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory. The Yokuts numbered about 25,000 and were clustered into about fifty independent local sub-tribes. Historians believe approximately 22 villages stretched from Stockton northerly to the Tehachapi Mountains southerly, although most were concentrated around Tulare Lake, Kaweah River, and its tributaries. As a result, numerous cultural resource sites have been identified in Tulare County.

Cultural Resources Record Search and Native American Consultation: A records search was conducted on behalf of the Applicant by Taylored Archaeology to determine if historical or archaeological sites had previously been recorded within the study area, if the project area had been systematically surveyed by archaeologists prior to the initial study, and/or whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive.

The records search stated that there have been two previous cultural resource studies conducted within a small portion of the project area, and that two additional previous cultural resources studies were conducted within one-half mile of the project site. According to the records search, there are no recorded cultural resources within the project area, and there are two recorded resources (Burlington Northern Santa Fe Railway and the Old 99 Ditch of the Tulare Irrigation District) within the one-half mile radius. The full findings of the cultural records search can be found in Appendix C.

The Santa Rosa Rancheria Tachi Yokut Tribe is the only tribe that has requested to be notified of projects within the City of Tulare for AB 52 tribal consultation. Other tribes in the area were notified of the project pursuant to SB 18. The Santa Rosa Rancheria Tachi Yokut Tribe was notified on January 18, 2022. The tribe responded on February 2, 2022 and requested that a cultural presentation be conducted prior to ground

disturbance. The City of Tulare has agreed to this request and a cultural presentation will be required as a CEQA mitigation measure and a condition of project approval.

Definitions

- **Historical Resources**: Historical resources are defined by CEQA as resources that are listed in or eligible for the California Register of Historical Resources, resources that are listed in a local historical resource register, or resources that are otherwise determined to be historical under California Public Resources Code Section 21084.1 or California Code of Regulations Section 15064.5. Under these definitions Historical Resources can include archaeological resources, Tribal cultural resources, and Paleontological Resources.

- **Archaeological Resources:** As stated above, archaeological resources may be considered historical resources. If they do not meet the qualifications under the California Public Resources Code 21084.1 or California Code of Regulations Section 15064.5, they are instead determined to be "unique" as defined by the CEQA Statute Section 21083.2. A unique archaeological resource is an artifact, object, or site that: (1) contains information (for which there is a demonstrable public interest) needed to answer important scientific research questions; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

- **Tribal Cultural Resource (TCR):** Tribal Cultural Resources can include site features, places, cultural landscapes, sacred places, or objects, which are of cultural value to a Tribe. It is either listed on or eligible for the CA Historic Register or a local historic register or determined by the lead agency to be treated as TCR.

- **Paleontological Resources:** For the purposes of this section, "paleontological resources" refers to the fossilized plant and animal remains of prehistoric species. Paleontological Resources are a limited scientific and educational resource and are valued for the information they yield about the history of the earth and its ecology. Fossilized remains, such as bones, teeth, shells, and leaves, are found in geologic deposits (i.e., rock formations). Paleontological resources generally include the geologic formations and localities in which the fossils are collected.

Regulatory Setting

National Historic Preservation Act: The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register: The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, experimental, or other value. In order for a resource to be designated as a historical landmark, it must meet the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).

- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

City of Tulare General Plan: The City of Tulare General Plan includes the following goals and policies pertaining to tribal cultural resources:

Goal COS-5 To manage and protect sites of cultural and archaeological importance for the benefit of present and future generations.

- COS-P5.1 Archaeological Resources. The City shall support efforts to protect and/or recover archaeological resources.
- COS-P5.6 Protection of Resources with Potential State or Federal Designations. The City shall encourage the protection of cultural and archaeological sites with potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values.
- COS-P5.9 Discovery of Archaeological Resources. In the event that archaeological/ paleontological resources are discovered during site excavation, grading, or construction, the City shall require that work on the site be suspended within 100 feet of the resource until the significance of the features can be determined by a qualified archaeologist/ paleontologist. If significant resources are determined to exist, an archaeologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.
- COS-P5.10 Discovery of Human Remains. Consistent with Section 7050.5 of the California Health and Safety Code and CEQA Guidelines (Section 15064.5), if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). If any human remains are discovered or recognized in any location on the project site, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains until:

    - The Tulare County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and
    - If the remains are of Native American origin,
        - The descendants of the deceased Native Americans have made a timely recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98.
        - The Native American Heritage Commission was unable to identify a descendant, or the descendant failed to make a recommendation within 24 hours after being notified by the commission, or

  - The landowner or his or her authorized representative rejects any timely recommendations of the descendent, and mediation conducted by the Native American Heritage Commission has failed to provide measures acceptable to the landowner.

- COS-P5.11 Impact Mitigation. If preservation of cultural/historical resources is not feasible, the City shall make every effort to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.
- COS-P5.12 Mitigation Monitoring for Historical Resources. The City shall develop standards for monitoring mitigation measures established for the protection of historical resources prior to development.
- COS-P5.13 Alteration of Sites with Identified Cultural Resources. When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. The City shall permit development in these areas only after a site-specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.
- COS-P5.14 Education Program Support. The City shall support local, state, and national education programs on cultural and archaeological resources.
- COS-P5.15 Solicit Input from Local Native Americans. The City shall solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- COS-P5.16 Confidentiality of Archaeological Sites. The City shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect resources that are determined to exist. An archaeologist/paleontologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.
- COS-P5.17 Cooperation of Property Owners. The City shall encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities and encourage public support for the preservation of these resources.
- COS-P5.18 Archaeological Resource Surveys. Prior to project approval, the City shall require project applicant to have a qualified archaeologist conduct the following activities: (1) conduct a record search at the Regional Archaeological Information Center located at California State University Bakersfield and other appropriate historical repositories, (2) conduct field surveys where appropriate, and (3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards (Archaeological Resource Management Reports).

Discussion

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:

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

Less Than Significant Impact with Mitigation: The project would not cause a substantial adverse change in the significance of a tribal cultural resource, nor is it listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. Based on the results of the records search, no previously recorded tribal cultural resources are located within the project site. Although no historical resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures TCR-1, TCR -2, TCR -3, and TCR-4 will ensure that impacts to this checklist item will be *less than significant with mitigation incorporation*.

b) 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 Resource 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: The lead agency has not determined there to be any known tribal cultural resources located within the project area. Additionally, there are not believed to be any paleontological resources or human remains buried within the project area's vicinity. However, the potential for buried cultural deposits in the Project area is moderate. If resources were found to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American Tribe. Implementation of Mitigation Measures TCR-1, TCR -2, TCR -3, and TCR-4 will ensure that any impacts resulting from project implementation remain *less than significant with mitigation incorporation.*

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure TCR-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.

Mitigation Measure TCR-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an

unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Mitigation Measure TCR-3: Upon coordination with the Tulare County Resource Management Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.

Mitigation Measure TCR-4: Prior to ground disturbance, the project contractor must receive a cultural presentation provided by the Santa Rosa Rancheria Tachi Yokut Tribe. The cultural presentation will describe the sensitivity of the area, discuss how to identify sensitive materials and the processes that should be followed if sensitive tribal materials are discovered, and review the history and geography of the region and the laws and regulations pertaining to tribal cultural resources.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or **stormwater drainage, electric power, natural gas, or telecommunications facilities,** the construction or relation 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?	☐	☐	☐	☑

Environmental Setting

According to the Tulare Municipal Service Review (2013), the City would be able to provide the necessary infrastructure services and utility systems required for new development. Utilities and service systems include wastewater treatment, storm water drainage facilities, water supply, landfill capacity, and solid waste disposal.

Wastewater: Wastewater will be collected and treated at the City's wastewater treatment facility, which is located at the intersection Paige Ave. and West St.

Solid Waste: Solid waste collection service is provided by the City of Tulare Solid Waste Division. Solid waste disposal will be provided by the Tulare County Solid Waste Department, which operates two landfills and six transfer stations within the county. Combined, these landfills receive approximately 300,000 tons of solid waste per day.

Water: Water for the proposed development will be provided by the City of Tulare. The City's primary water source is groundwater. Existing water entitlements currently provide water to the proposed project site. Implementation of the proposed project will not require additional water entitlements.

Storm Drainage: Tulare is currently in an agreement with Tulare Irrigation District (TID). The City pumps storm water into canals owned by TID. Storm water is also disposed and detained in storm drainage detention and retention basins throughout the City. Tulare actively improves its storm drainage system to accommodate new urban development.

Regulatory Setting

CalRecycle: California Code of Regulations, Title 14, Natural Resources – Division 7 contains all current CalRecycle regulations regarding nonhazardous waste management in the state. These regulations include standards for the handling of solid waste, standards for the handling of compostable materials, design standards for disposal facilities, and disposal standards for specific types of waste.

Central Valley RWQCB: The Central Valley RWQCB requires a Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a SWPPP to manage stormwater generated during project construction will be required.

The Central Valley RWQCB regulates Wastewater Discharges to Land by establishing thresholds for discharged pollutants and implementing monitoring programs to evaluate program compliance. This program regulates approximately 1500 dischargers in the region.

The Central Valley RWQCB is also responsible for implementing the federal program, the National Pollutant Discharge Elimination System (NPDES). The NPDES Program is the federal permitting program that regulates discharges of pollutants to surface waters of the U.S. Under this program, a NPDES permit is required to discharge pollutants into Waters of the U.S. There are 350 permitted facilities within the Central Valley Region.

Discussion

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

Less than Significant Impact: The proposed project will require the extension of existing utility services into the project area. This is not anticipated to cause a significant environmental effect because extension/relocation would occur within the right-of-way prior to street construction to minimize environmental impacts.

The City's wastewater treatment facility (WWTF) has two wastewater treatment trains, domestic and industrial WWTT. Both operate in accordance with the Central Valley Regional Water Quality Control Board Waste Discharge Requirements (WDR) Order NO. R5-2002-0186. The City's Municipal Service Review (2013) indicates that Tulare's WWTF is at sufficient capacity to accommodate new development, including the proposed residential subdivision, which would tie into existing City sewage lines in the project vicinity. Based on calculations from the City of Tulare Sewer System Master Plan Table 3.7, a total of 33,670 gallons per day (gpd) of wastewater is estimated to be generated by the proposed project. This equates to approximately 0.034 million gallons per day (mgd). The Tulare Water Pollution Control Facility (TWPCF) has an estimated capacity of 6.0 mgd. The proposed project would contribute approximately 0.6% of the total remaining capacity of the TWPCF. Furthermore, the proposed project site was analyzed for service to be provided in the City's Sewer System Master Plan

and development here has been accounted for in this document. In 2020, the sewer system is large enough to accommodate a population of 115,000, far above the current population.

The project borders a proposed new stormwater retention basin, and would expand on this basin, to retain all stormwater. The basin would hold 16.96 acre-feet of storm water. The Tulare standards rational formula states that the maximum runoff this site can produce is 15.54 cubic ft/sec, which the basin would have capacity for.

It is not anticipated that the proposed project would result in the relocation or construction of new or expanded wastewater treatment facilities, power plants, natural gas extraction facilities or telecommunication facilities. In the event that any of these facilities become required, they would be required to serve more than just the proposed project and would be subject to separate environmental review and approval. The impact is *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: Water services will be provided by the City of Tulare. The City's water supply source is comprised of 27 wells that extract water from an underground aquifer. According to City's Urban Water Management Plan (2021), the projected water supply for Tulare in year 2025 is 10,554 million gallons, which is comprised of both groundwater and recycled water. The Plan projects a demand of 6,255 million gallons for a projected population of 74,328. This leaves ample amount of projected water supply. The City engages is a variety of strategies to ensure that adequate water resources area available throughout normal, dry, and multiple dry years. These strategies include a water conservation staging ordinance, which establishes five progressively more restrictive stages of water conservation to be implemented during dry and consecutive-dry years. The city also utilizes conjunctive use techniques, which involve diverting excess surface water for groundwater recharge during wet years so that it will be available during dry years. The proposed project is planned to be consistent with the 2020 UWMP, which demonstrates adequate water supply to serve development in the City. Additionally, Tulare General Plan Policy LU-P11.3 requires all new development to be responsible for expansion of existing facilities, such as water systems, made necessary to serve the new development. The use of these strategies greatly improves the City's control over water supply and demand, which provides water supply flexibility and significantly reduces the City's vulnerability in the event of dry and multiple dry years.

Based on average per-person water use in the State of California and average household size in the City of Tulare, water demand for the proposed 88-unit residential development is estimated to be approximately 25,656.4 gallons of water daily, or 28.7 acre-feet per year. This would be a reduction in water demand for the project site from existing water demand for existing agricultural use. Including the projected excess water supply in 2025, the impact is *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: As previously discussed above for item a) in this section, wastewater generated by the project would be collected and treated at the City's domestic wastewater treatment train (WWTT). Although the proposed project will increase in wastewater generation due to the

addition of 88 residential units, the wastewater produced would not exceed the City's WWTF capacity of 6.0 MGD because the WWTF has been designed to serve and accommodate demand within the City's growth boundary, and this project is within the existing City limits. The impact is *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: Solid waste collection service will be provided by the City of Tulare and waste disposal will be provided by the County. Solid waste is anticipated as a result of project implementation; however, the project does not include any components that would generate excessive waste and the existing landfills have sufficient permitted capacity to accommodate the project's solid waste disposal needs. The impact is *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: This proposed project conforms to all applicable management and reduction statutes and regulations related to solid waste disposal. The development will comply with the adopted policies related to solid waste, and will comply with all applicable federal, state, and local statutes and regulations pertaining to disposal of solid waste, including recycling. Therefore, the proposed project would have *no impact* on solid waste regulations.

XX. WILDFIRE

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 Incorporation	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 uncontrolled spread of a 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?	☐	☐	☐	☑

Regulatory Setting

Definitions:
Fire hazard severity zones: geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189.

Tulare Unit Strategic Fire Plan Key Goals and Objectives:

- *Support the implementation and maintenance of defensible space inspections around structures*
- *Analyze trends in fire cause and focus prevention and education efforts to modify behaviors and effect change to reduce ignitions within Tulare County*
- *Identify and evaluate wildland fire hazards and recognize assets at risk, collecting and analyzing data to determine fuel reduction project, and other projects.*
- *Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g. roads, fire lines, water sources) developed during fire suppression efforts, taking into consideration those identified in previous planning efforts*

Tulare County Disaster Preparedness Guide (2011): The Tulare County Preparedness Guide provides guidelines regarding disaster preparedness and evacuation planning for Tulare County residents.

Discussion

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact: The project would not substantially impair an adopted emergency response plan or emergency evacuation plan including the Tulare Unit Strategic Fire Plan and the Tulare County Disaster Preparedness Guide. There is *no impact.*

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact: The project is located on a flat area of land with insignificant risk of fire. The Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of fire within the City of Tulare as having unlikely frequency, limited extent, limited magnitude, and low significance. The project would not exacerbate wildfire risks and expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. There is *no impact.*

c) 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?

Less than significant Impact: The construction of the project involves adding new local residential streets, and new and relocated utilities. Utilities such as emergency water sources and power lines would be included as part of the proposed development, however all improvements would be subject to City standards and fire chief approval. The proposed project would not exacerbate fire risk and the impact would be *less than significant.*

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes?

No Impact: The project site is located on land with relatively flat topography. Therefore, the project would not be susceptible to downslope or downstream flooding or landslides as a result of post-fire instability or drainage changes. There is *no impact.*

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
b) Does the project have the potential substantially to 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) 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)?	☐	☐	☑	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

Discussion

a) Does the project have the potential to 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, 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 Impact with Mitigation: This initial study/mitigated negative declaration found the project could have significant impacts on biological, cultural, hazardous materials, water quality, and Tribal cultural resources. However, implementation of the identified mitigation measures for each respective section would ensure that impacts are *less than significant with mitigation incorporation.*

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. Due to the nature of the project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc). Impacts would be *less than significant*.

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 analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to less than significant, which results in a *less than significant* impact to this checklist item.

3.6 MITIGATION MONITORING AND REPORTING PROGRAM

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the project in order to monitor the implementation of the mitigation measures that have been adopted for the project. This Mitigation Monitoring and Reporting Program (MMRP) has been created based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Kensington 3/4 Tentative Subdivision Map Project proposed by D.R. Horton in the City of Tulare.

The first column of the table identifies the mitigation measure. The second column names the party responsible for carrying out the required action. The third column, "Timing of Mitigation Measure" identifies the time the mitigation measure should be initiated. The fourth column, "Responsible Party for Monitoring," names the party ensuring that the mitigation measure is implemented. The last column will be used by the City of Tulare to ensure that the individual mitigation measures have been monitored.

Plan checking and verification of mitigation compliance shall be the responsibility of the City of Tulare.

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1: Take Avoidance Survey Burrowing Owls – Preconstruction Survey. A qualified biologist will conduct a take avoidance survey for burrowing owls within 14 days prior to the start of construction. The survey area will include all suitable habitats on and within 200 meters of project impact areas, where accessible. Implementation of avoidance and minimization measures (Bio MM 2) would be triggered by positive owl presence on the site where project activities will occur.	Project Sponsor	Within 14 days prior to the start of construction.	City of Tulare	
Mitigation Measure BIO-2: Disturbance-Free Buffer around Active Nest Burrows – Bio Monitoring If owl presence is detected on the site where project activities will occur during preconstruction surveys (MM BIO-1), one of the following must be implemented: Option A: Disturbance-Free Buffer around Active Nest Burrows – Bio Monitoring (Avoidance of Active Nests and Roosts) If project activities are undertaken during the breeding season (February 1 - August 31) and active nest burrows are identified within or near project impact areas, a 200-meter disturbance-free buffer will be established around these nest burrows. If construction activities take place within the established 200-meter buffer, a biological monitor will be present to avoid, minimize, and mitigate potential negative	Project Sponsor	Within 14 days prior to the start of construction, Ongoing during construction.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
impacts, and a 50-meter disturbance-free buffer will be implemented. During the nonbreeding season (September 1 - January 31), resident owls occupying burrows in or near project impact areas will be avoided by establishing a 50-meter disturbance-free buffer. Smaller buffer areas during the nonbreeding season may be implemented with the presence of a qualified biological monitor during all activities occurring within 50 meters of occupied burrows. Buffers will remain in place for the duration of project activities occurring within the vicinity of burrowing owl activity. Option B: Passive Relocation of Resident Owls During the nonbreeding season (September 1-January 31), resident owls occupying burrows in project impact areas may be passively relocated to alternative habitats. This activity would be conducted per a relocation plan prepared by a qualified biologist. Passive relocation may include one or more of the following elements: 1) establishing a minimum 50-foot buffer around all active burrowing owl burrows, 2) removing all suitable burrows outside the 50-foot buffer and up to 50 meters outside of the impact areas as necessary, 3) installing one- way doors on all potential owl burrows within the 50-foot buffer, 4) leaving one-way doors in place for 48 hours to ensure owls have vacated the burrows, and 5) removing the doors and excavating the remaining burrows within the 50-foot buffer.				
Mitigation Measure CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	
Mitigation Measure CUL-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.				
Mitigation Measure HAZ-1: Prior to the issuance of grading permits for ground clearance or excavation, the project proponent shall prepare a soils report and investigation for the presence of environmentally persistent pesticides, such as organochlorinated pesticides, in conjunction with the California Department of Toxic Substances Control (DTSC) and in accordance with DTSC's 2008 Interim Guidance for Sampling Agricultural Properties (Third Revision). The soils report shall: A. Conduct soil samples and analyze for environmentally persistent pesticides such as organochlorinated pesticides, in conjunction with the California Department of Toxic Substances Control (DTSC), and in accordance with DTSC's 2008 Interim Guidance for Sampling Agricultural Properties (Third Revision). B. Include a limited soil assessment and investigation for the presence of aerially deposited lead on the project site along North Mooney Boulevard and East Cartmill Avenue. C. Conduct soil sampling and analysis in the inferred locations of any former buildings on the project site in accordance with the DTSC 2006 Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electric Transformers.	Project Sponsor	Prior to issuance of grading permits	City of Tulare	
Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit. •Prior to issuance of grading permits for Phase 1	Project Sponsor	Prior to the start of construction (Prior to Issuance of grading permits).	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
the Applicant shall submit a copy of the NOI to the City. •The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the site during construction for compliance.				
Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to: • Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust; • A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures; • Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used; • Soil stockpiles and graded slopes will be covered after two weeks of inactivity and 24 hours prior to and during extreme weather conditions; and, • BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc.	Project Sponsor	45 days prior to the start of construction and grading	City of Tulare	
Mitigation Measure HYD-3: A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP devices be inspected, cleaned and maintained in accordance with the	Project Sponsor	Prior to the start of construction (prior to issuance of grading permits)	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following: • Runoff shall be directed away from trash and loading dock areas; • Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes; • Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and, • Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system.				
Mitigation Measure TCR-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	
Mitigation Measure TCR-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
American burials.				
Mitigation Measure TCR-3: Upon coordination with the Tulare County Resource Management Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.	Project Sponsor, Construction Contractor, & Qualified Archaeologist	Ongoing during construction.	City of Tulare	
Mitigation Measure TCR-4: Prior to ground disturbance, the project contractor must receive a cultural presentation provided by the Santa Rosa Rancheria Tachi Yokut Tribe. The cultural presentation will describe the sensitivity of the area, discuss how to identify sensitive materials and the processes that should be followed if sensitive tribal materials are discovered, and review the history and geography of the region and the laws and regulations pertaining to tribal cultural resources	Project Sponsor, Construction Contractor, & Santa Rosa Rancheria Tachi Yokut Tribe	Prior to project construction.	City of Tulare	

3.7 Supporting Information and Sources

1) AB 3098 List
2) City of Tulare General Plan
3) City of Tulare General Plan EIR
4) City of Tulare Climate Action Plan
5) City of Tulare Draft 2020 Urban Water Management Plan
6) City of Tulare Zoning Ordinance
7) City of Tulare Sewer System Master Plan
8) Improvement Standards of Tulare County
9) City of Tulare Municipal Service Review
10) Engineering Standards, City of Tulare
11) SJVAPCD Regulations and Guidelines
12) Sacramento Valley Land Use/Water Supply Analysis Handbook, 2007
13) Flood Insurance Rate Maps
14) California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
15) 2008 (California Environmental Quality Act CEQA Guidelines
16) California Building Code
17) California Stormwater Pollution Prevention Program (SWPPP)
18) "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
19) Government Code Section 65962.5
20) California Environmental Protection Agency (CEPA)
21) Cypher, Brian, Et Al. Conservation of Endangered Tipton Kangaroo Rats (Dipodomys Nitratoides Nitratoides): Status Surveys, Habitat Suitability, And Conservation Strategies. California Department Of Fish And Wildlife, 2016.
22) California Energy Efficiency Strategic Plan: New Residential Zero Net Energy Action Plan 2015-2020, June 2015
23) California Energy Commission
24) San Joaquin Valley Air Pollution Control District Mitigation Measures (http://www.valleyair.org/transportation/Mitigation-Measures.pdf)
25) "Residential Water Use Trends and Implications for Conservation Policy." Legislative Analyst's Office/The California Legislature's Nonpartisan Fiscal and Policy Advisor. March 2017.
26) US Census (2014-2018). QuickFacts Tulare city, California. https://www.census.gov/quickfacts/fact/table/tularecitycalifornia/HSD310218#HSD310218

Section 4

List of Preparers

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 4
List of Preparers

Project Title: KCOK 5/9 Subdivision Map

List of Preparers

4-Creeks Inc.

- David Duda, AICP, GISP
- Steve Macias, Civil Engineer
- Molly McDonnel, Associate Planner

Persons and Agencies Consulted

The following individuals and agencies contributed to this Initial Study/Mitigated Negative Declaration:

City of Tulare

- Mario Anaya, Principal Planner
- Steven Sopp, Senior Planner

California Historic Resources Information System

- Celeste Thomson, Coordinator

JLB Traffic Engineering

- Jose Luis Benavides, P.E., T.E.

SOAR Environmental Consulting

- Travis Albert, Biologist
- Sam Hopstone, EIT, Environmental Engineer

Appendix A

CalEEMod Report

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

KCOK 5/9 Subdivision Map

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	88.00	Dwelling Unit	25.87	158,400.00	252

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	7			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Established

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - No Demolition Needed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Vehicle Trips -

Energy Use -

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

Water And Wastewater -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Fleet Mix - District Accepted Fleet Mix for Residential Projects

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.52	0.52
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.7360e-003	9.0000e-004
tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.17	0.06
tblFleetMix	MH	3.4400e-003	2.2000e-003
tblFleetMix	MHD	0.01	7.6000e-003
tblFleetMix	OBUS	6.3400e-004	0.00
tblFleetMix	SBUS	1.4300e-003	1.0000e-004
tblFleetMix	UBUS	4.7000e-004	4.3000e-003
tblLandUse	LotAcreage	28.57	25.87
tblWoodstoves	NumberCatalytic	25.87	11.93
tblWoodstoves	NumberNoncatalytic	25.87	11.93

2.0 Emissions Summary

KCOK 5/9 Subdivision Map - Tulare County, Annual

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2433	2.2801	2.2527	4.3800e-003	0.4346	0.1028	0.5374	0.1916	0.0958	0.2874	0.0000	382.5135	382.5135	0.0968	2.8400e-003	385.7793
2024	0.2075	1.8233	2.2381	4.0500e-003	0.0412	0.0809	0.1220	0.0111	0.0761	0.0872	0.0000	351.8995	351.8995	0.0727	4.1800e-003	354.9631
2025	1.5164	0.2550	0.4053	6.7000e-004	4.9700e-003	0.0117	0.0167	1.3300e-003	0.0109	0.0122	0.0000	59.0735	59.0735	0.0152	2.7000e-004	59.5330
Maximum	**1.5164**	**2.2801**	**2.2527**	**4.3800e-003**	**0.4346**	**0.1028**	**0.5374**	**0.1916**	**0.0958**	**0.2874**	**0.0000**	**382.5135**	**382.5135**	**0.0968**	**4.1800e-003**	**385.7793**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2433	2.2801	2.2527	4.3800e-003	0.4346	0.1028	0.5374	0.1916	0.0958	0.2874	0.0000	382.5131	382.5131	0.0968	2.8400e-003	385.7788
2024	0.2075	1.8233	2.2381	4.0500e-003	0.0412	0.0809	0.1220	0.0111	0.0761	0.0872	0.0000	351.8991	351.8991	0.0727	4.1800e-003	354.9628
2025	1.5164	0.2550	0.4053	6.7000e-004	4.9700e-003	0.0117	0.0167	1.3300e-003	0.0109	0.0122	0.0000	59.0734	59.0734	0.0152	2.7000e-004	59.5330
Maximum	**1.5164**	**2.2801**	**2.2527**	**4.3800e-003**	**0.4346**	**0.1028**	**0.5374**	**0.1916**	**0.0958**	**0.2874**	**0.0000**	**382.5131**	**382.5131**	**0.0968**	**4.1800e-003**	**385.7788**

KCOK 5/9 Subdivision Map - Tulare County, Annual

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2023**	**3-31-2023**	0.5877	0.5877
2	**4-1-2023**	**6-30-2023**	0.8593	0.8593
3	**7-1-2023**	**9-30-2023**	0.5441	0.5441
4	**10-1-2023**	**12-31-2023**	0.5449	0.5449
5	**1-1-2024**	**3-31-2024**	0.5044	0.5044
6	**4-1-2024**	**6-30-2024**	0.5036	0.5036
7	**7-1-2024**	**9-30-2024**	0.5092	0.5092
8	**10-1-2024**	**12-31-2024**	0.5100	0.5100
9	**1-1-2025**	**3-31-2025**	0.9948	0.9948
10	**4-1-2025**	**6-30-2025**	0.7706	0.7706
		Highest	0.9948	0.9948

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0339	0.0765	2.8748	7.4500e-003		0.3665	0.3665		0.3665	0.3665	48.2297	39.1896	87.4193	0.2272	7.0000e-004	93.3080
Energy	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	235.4900	235.4900	0.0126	3.3100e-003	236.7923
Mobile	0.2542	0.4641	2.8399	7.8300e-003	0.8586	5.8900e-003	0.8645	0.2289	5.4900e-003	0.2344	0.0000	728.9844	728.9844	0.0414	0.0364	740.8755
Waste						0.0000	0.0000		0.0000	0.0000	18.4153	0.0000	18.4153	1.0883	0.0000	45.6232
Water						0.0000	0.0000		0.0000	0.0000	1.8190	7.7457	9.5646	0.1875	4.4900e-003	15.5899
Total	**1.2993**	**0.6369**	**5.7556**	**0.0159**	**0.8586**	**0.3802**	**1.2388**	**0.2289**	**0.3798**	**0.6087**	**68.4640**	**1,011.4096**	**1,079.8737**	**1.5571**	**0.0449**	**1,132.1889**

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7869	7.5200e-003	0.6528	3.0000e-005		3.6200e-003	3.6200e-003		3.6200e-003	3.6200e-003	0.0000	1.0673	1.0673	1.0200e-003	0.0000	1.0929
Energy	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	232.7605	232.7605	0.0124	3.2900e-003	234.0487
Mobile	0.2498	0.4317	2.6374	7.0900e-003	0.7749	5.3800e-003	0.7803	0.2066	5.0100e-003	0.2116	0.0000	660.2559	660.2559	0.0390	0.0337	671.2817
Waste						0.0000	0.0000		0.0000	0.0000	18.4153	0.0000	18.4153	1.0883	0.0000	45.6232
Water						0.0000	0.0000		0.0000	0.0000	1.8190	7.7457	9.5646	0.1875	4.4900e-003	15.5899
Total	**1.0480**	**0.5356**	**3.3312**	**7.7400e-003**	**0.7749**	**0.0168**	**0.7917**	**0.2066**	**0.0164**	**0.2230**	**20.2343**	**901.8293**	**922.0637**	**1.3282**	**0.0415**	**967.6364**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**19.35**	**15.91**	**42.12**	**51.32**	**9.75**	**95.58**	**36.09**	**9.75**	**95.68**	**63.36**	**70.45**	**10.83**	**14.61**	**14.70**	**7.61**	**14.53**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/11/2023	3/10/2023	5	20	
2	Grading	Grading	3/11/2023	5/12/2023	5	45	
3	Building Construction	Building Construction	5/13/2023	1/17/2025	5	440	

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

4	Paving	Paving	1/18/2025	3/7/2025	5	35	
5	Architectural Coating	Architectural Coating	3/8/2025	4/25/2025	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 320,760; Residential Outdoor: 106,920; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	32.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2752	0.1824	3.8000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	33.4507	33.4507	0.0108	0.0000	33.7212
Total	**0.0266**	**0.2752**	**0.1824**	**3.8000e-004**	**0.1966**	**0.0127**	**0.2092**	**0.1010**	**0.0117**	**0.1127**	**0.0000**	**33.4507**	**33.4507**	**0.0108**	**0.0000**	**33.7212**

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

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.4000e-004	4.8900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1387	1.1387	4.0000e-005	4.0000e-005	1.1507
Total	**6.3000e-004**	**4.4000e-004**	**4.8900e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1387**	**1.1387**	**4.0000e-005**	**4.0000e-005**	**1.1507**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2752	0.1824	3.8000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	33.4507	33.4507	0.0108	0.0000	33.7211
Total	**0.0266**	**0.2752**	**0.1824**	**3.8000e-004**	**0.1966**	**0.0127**	**0.2092**	**0.1010**	**0.0117**	**0.1127**	**0.0000**	**33.4507**	**33.4507**	**0.0108**	**0.0000**	**33.7211**

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

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.4000e-004	4.8900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1387	1.1387	4.0000e-005	4.0000e-005	1.1507
Total	**6.3000e-004**	**4.4000e-004**	**4.8900e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1387**	**1.1387**	**4.0000e-005**	**4.0000e-005**	**1.1507**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0747	0.7766	0.6312	1.4000e-003		0.0321	0.0321		0.0295	0.0295	0.0000	122.7042	122.7042	0.0397	0.0000	123.6964
Total	**0.0747**	**0.7766**	**0.6312**	**1.4000e-003**	**0.2071**	**0.0321**	**0.2391**	**0.0822**	**0.0295**	**0.1117**	**0.0000**	**122.7042**	**122.7042**	**0.0397**	**0.0000**	**123.6964**

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

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5700e-003	1.1000e-003	0.0122	3.0000e-005	3.5800e-003	2.0000e-005	3.6000e-003	9.5000e-004	2.0000e-005	9.7000e-004	0.0000	2.8468	2.8468	1.0000e-004	9.0000e-005	2.8767
Total	**1.5700e-003**	**1.1000e-003**	**0.0122**	**3.0000e-005**	**3.5800e-003**	**2.0000e-005**	**3.6000e-003**	**9.5000e-004**	**2.0000e-005**	**9.7000e-004**	**0.0000**	**2.8468**	**2.8468**	**1.0000e-004**	**9.0000e-005**	**2.8767**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0747	0.7766	0.6312	1.4000e-003		0.0321	0.0321		0.0295	0.0295	0.0000	122.7041	122.7041	0.0397	0.0000	123.6962
Total	**0.0747**	**0.7766**	**0.6312**	**1.4000e-003**	**0.2071**	**0.0321**	**0.2391**	**0.0822**	**0.0295**	**0.1117**	**0.0000**	**122.7041**	**122.7041**	**0.0397**	**0.0000**	**123.6962**

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

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5700e-003	1.1000e-003	0.0122	3.0000e-005	3.5800e-003	2.0000e-005	3.6000e-003	9.5000e-004	2.0000e-005	9.7000e-004	0.0000	2.8468	2.8468	1.0000e-004	9.0000e-005	2.8767
Total	**1.5700e-003**	**1.1000e-003**	**0.0122**	**3.0000e-005**	**3.5800e-003**	**2.0000e-005**	**3.6000e-003**	**9.5000e-004**	**2.0000e-005**	**9.7000e-004**	**0.0000**	**2.8468**	**2.8468**	**1.0000e-004**	**9.0000e-005**	**2.8767**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1298	1.1868	1.3401	2.2200e-003		0.0577	0.0577		0.0543	0.0543	0.0000	191.2389	191.2389	0.0455	0.0000	192.3762
Total	**0.1298**	**1.1868**	**1.3401**	**2.2200e-003**		**0.0577**	**0.0577**		**0.0543**	**0.0543**	**0.0000**	**191.2389**	**191.2389**	**0.0455**	**0.0000**	**192.3762**

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

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0335	0.0101	1.5000e-004	4.9100e-003	2.1000e-004	5.1200e-003	1.4200e-003	2.0000e-004	1.6200e-003	0.0000	14.4329	14.4329	7.0000e-005	2.1700e-003	15.0815
Worker	9.2200e-003	6.4700e-003	0.0718	1.8000e-004	0.0210	1.1000e-004	0.0211	5.5900e-003	1.0000e-004	5.6900e-003	0.0000	16.7012	16.7012	5.7000e-004	5.4000e-004	16.8767
Total	**0.0101**	**0.0399**	**0.0819**	**3.3000e-004**	**0.0259**	**3.2000e-004**	**0.0263**	**7.0100e-003**	**3.0000e-004**	**7.3100e-003**	**0.0000**	**31.1341**	**31.1341**	**6.4000e-004**	**2.7100e-003**	**31.9581**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1298	1.1868	1.3401	2.2200e-003		0.0577	0.0577		0.0543	0.0543	0.0000	191.2387	191.2387	0.0455	0.0000	192.3760
Total	**0.1298**	**1.1868**	**1.3401**	**2.2200e-003**		**0.0577**	**0.0577**		**0.0543**	**0.0543**	**0.0000**	**191.2387**	**191.2387**	**0.0455**	**0.0000**	**192.3760**

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

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0335	0.0101	1.5000e-004	4.9100e-003	2.1000e-004	5.1200e-003	1.4200e-003	2.0000e-004	1.6200e-003	0.0000	14.4329	14.4329	7.0000e-005	2.1700e-003	15.0815
Worker	9.2200e-003	6.4700e-003	0.0718	1.8000e-004	0.0210	1.1000e-004	0.0211	5.5900e-003	1.0000e-004	5.6900e-003	0.0000	16.7012	16.7012	5.7000e-004	5.4000e-004	16.8767
Total	**0.0101**	**0.0399**	**0.0819**	**3.3000e-004**	**0.0259**	**3.2000e-004**	**0.0263**	**7.0100e-003**	**3.0000e-004**	**7.3100e-003**	**0.0000**	**31.1341**	**31.1341**	**6.4000e-004**	**2.7100e-003**	**31.9581**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7223**	**303.7223**	**0.0718**	**0.0000**	**305.5179**

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

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0531	0.0156	2.4000e-004	7.7900e-003	3.4000e-004	8.1400e-003	2.2500e-003	3.3000e-004	2.5800e-003	0.0000	22.5643	22.5643	1.0000e-004	3.3900e-003	23.5770
Worker	0.0134	9.0200e-003	0.1046	2.8000e-004	0.0334	1.6000e-004	0.0336	8.8800e-003	1.5000e-004	9.0300e-003	0.0000	25.6129	25.6129	8.2000e-004	7.9000e-004	25.8683
Total	**0.0147**	**0.0621**	**0.1203**	**5.2000e-004**	**0.0412**	**5.0000e-004**	**0.0417**	**0.0111**	**4.8000e-004**	**0.0116**	**0.0000**	**48.1772**	**48.1772**	**9.2000e-004**	**4.1800e-003**	**49.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7220**	**303.7220**	**0.0718**	**0.0000**	**305.5175**

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

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0531	0.0156	2.4000e-004	7.7900e-003	3.4000e-004	8.1400e-003	2.2500e-003	3.3000e-004	2.5800e-003	0.0000	22.5643	22.5643	1.0000e-004	3.3900e-003	23.5770
Worker	0.0134	9.0200e-003	0.1046	2.8000e-004	0.0334	1.6000e-004	0.0336	8.8800e-003	1.5000e-004	9.0300e-003	0.0000	25.6129	25.6129	8.2000e-004	7.9000e-004	25.8683
Total	**0.0147**	**0.0621**	**0.1203**	**5.2000e-004**	**0.0412**	**5.0000e-004**	**0.0417**	**0.0111**	**4.8000e-004**	**0.0116**	**0.0000**	**48.1772**	**48.1772**	**9.2000e-004**	**4.1800e-003**	**49.4453**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.8900e-003	0.0811	0.1046	1.8000e-004		3.4300e-003	3.4300e-003		3.2300e-003	3.2300e-003	0.0000	15.0748	15.0748	3.5400e-003	0.0000	15.1634
Total	**8.8900e-003**	**0.0811**	**0.1046**	**1.8000e-004**		**3.4300e-003**	**3.4300e-003**		**3.2300e-003**	**3.2300e-003**	**0.0000**	**15.0748**	**15.0748**	**3.5400e-003**	**0.0000**	**15.1634**

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

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.6200e-003	7.6000e-004	1.0000e-005	3.9000e-004	2.0000e-005	4.0000e-004	1.1000e-004	2.0000e-005	1.3000e-004	0.0000	1.0998	1.0998	0.0000	1.6000e-004	1.1491
Worker	6.1000e-004	4.0000e-004	4.7800e-003	1.0000e-005	1.6600e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2278	1.2278	4.0000e-005	4.0000e-005	1.2395
Total	**6.7000e-004**	**3.0200e-003**	**5.5400e-003**	**2.0000e-005**	**2.0500e-003**	**3.0000e-005**	**2.0600e-003**	**5.5000e-004**	**3.0000e-005**	**5.8000e-004**	**0.0000**	**2.3276**	**2.3276**	**4.0000e-005**	**2.0000e-004**	**2.3886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.8900e-003	0.0811	0.1046	1.8000e-004		3.4300e-003	3.4300e-003		3.2300e-003	3.2300e-003	0.0000	15.0748	15.0748	3.5400e-003	0.0000	15.1633
Total	**8.8900e-003**	**0.0811**	**0.1046**	**1.8000e-004**		**3.4300e-003**	**3.4300e-003**		**3.2300e-003**	**3.2300e-003**	**0.0000**	**15.0748**	**15.0748**	**3.5400e-003**	**0.0000**	**15.1633**

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

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.6200e-003	7.6000e-004	1.0000e-005	3.9000e-004	2.0000e-005	4.0000e-004	1.1000e-004	2.0000e-005	1.3000e-004	0.0000	1.0998	1.0998	0.0000	1.6000e-004	1.1491
Worker	6.1000e-004	4.0000e-004	4.7800e-003	1.0000e-005	1.6600e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2278	1.2278	4.0000e-005	4.0000e-005	1.2395
Total	**6.7000e-004**	**3.0200e-003**	**5.5400e-003**	**2.0000e-005**	**2.0500e-003**	**3.0000e-005**	**2.0600e-003**	**5.5000e-004**	**3.0000e-005**	**5.8000e-004**	**0.0000**	**2.3276**	**2.3276**	**4.0000e-005**	**2.0000e-004**	**2.3886**

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0160**	**0.1502**	**0.2551**	**4.0000e-004**		**7.3200e-003**	**7.3200e-003**		**6.7400e-003**	**6.7400e-003**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3170**

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

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	6.0300e-003	2.0000e-005	2.0900e-003	1.0000e-005	2.1000e-003	5.6000e-004	1.0000e-005	5.6000e-004	0.0000	1.5495	1.5495	5.0000e-005	5.0000e-005	1.5642
Total	**7.8000e-004**	**5.0000e-004**	**6.0300e-003**	**2.0000e-005**	**2.0900e-003**	**1.0000e-005**	**2.1000e-003**	**5.6000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.5495**	**1.5495**	**5.0000e-005**	**5.0000e-005**	**1.5642**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0160**	**0.1502**	**0.2551**	**4.0000e-004**		**7.3200e-003**	**7.3200e-003**		**6.7400e-003**	**6.7400e-003**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3169**

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

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	6.0300e-003	2.0000e-005	2.0900e-003	1.0000e-005	2.1000e-003	5.6000e-004	1.0000e-005	5.6000e-004	0.0000	1.5495	1.5495	5.0000e-005	5.0000e-005	1.5642
Total	**7.8000e-004**	**5.0000e-004**	**6.0300e-003**	**2.0000e-005**	**2.0900e-003**	**1.0000e-005**	**2.1000e-003**	**5.6000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.5495**	**1.5495**	**5.0000e-005**	**5.0000e-005**	**1.5642**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4867					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.4897**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

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

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.4100e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6198	0.6198	2.0000e-005	2.0000e-005	0.6257
Total	**3.1000e-004**	**2.0000e-004**	**2.4100e-003**	**1.0000e-005**	**8.4000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6198**	**0.6198**	**2.0000e-005**	**2.0000e-005**	**0.6257**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4867					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.4897**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

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

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.4100e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6198	0.6198	2.0000e-005	2.0000e-005	0.6257
Total	**3.1000e-004**	**2.0000e-004**	**2.4100e-003**	**1.0000e-005**	**8.4000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6198**	**0.6198**	**2.0000e-005**	**2.0000e-005**	**0.6257**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2498	0.4317	2.6374	7.0900e-003	0.7749	5.3800e-003	0.7803	0.2066	5.0100e-003	0.2116	0.0000	660.2559	660.2559	0.0390	0.0337	671.2817
Unmitigated	0.2542	0.4641	2.8399	7.8300e-003	0.8586	5.8900e-003	0.8645	0.2289	5.4900e-003	0.2344	0.0000	728.9844	728.9844	0.0414	0.0364	740.8755

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	830.72	839.52	752.40	2,313,585	2,088,010
Total	830.72	839.52	752.40	2,313,585	2,088,010

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	38.40	22.60	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.524400	0.212000	0.167700	0.056300	0.000800	0.000900	0.007600	0.021200	0.000000	0.004300	0.002500	0.000100	0.002200

5.0 Energy Detail

Historical Energy Use: N

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

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	121.1690	121.1690	0.0102	1.2400e-003	121.7941
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	123.8985	123.8985	0.0105	1.2700e-003	124.5377
NaturalGas Mitigated	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546
NaturalGas Unmitigated	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	2.09115e+006	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546
Total		**0.0113**	**0.0964**	**0.0410**	**6.2000e-004**		**7.7900e-003**	**7.7900e-003**		**7.7900e-003**	**7.7900e-003**	**0.0000**	**111.5915**	**111.5915**	**2.1400e-003**	**2.0500e-003**	**112.2546**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	2.09115e+006	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546
Total		**0.0113**	**0.0964**	**0.0410**	**6.2000e-004**		**7.7900e-003**	**7.7900e-003**		**7.7900e-003**	**7.7900e-003**	**0.0000**	**111.5915**	**111.5915**	**2.1400e-003**	**2.0500e-003**	**112.2546**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	698628	123.8985	0.0105	1.2700e-003	124.5377
Total		**123.8985**	**0.0105**	**1.2700e-003**	**124.5377**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	683237	121.1690	0.0102	1.2400e-003	121.7941
Total		**121.1690**	**0.0102**	**1.2400e-003**	**121.7941**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7869	7.5200e-003	0.6528	3.0000e-005		3.6200e-003	3.6200e-003		3.6200e-003	3.6200e-003	0.0000	1.0673	1.0673	1.0200e-003	0.0000	1.0929
Unmitigated	1.0339	0.0765	2.8748	7.4500e-003		0.3665	0.3665		0.3665	0.3665	48.2297	39.1896	87.4193	0.2272	7.0000e-004	93.3080

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2470	0.0689	2.2220	7.4100e-003		0.3629	0.3629		0.3629	0.3629	48.2297	38.1223	86.3519	0.2262	7.0000e-004	92.2151
Landscaping	0.0196	7.5200e-003	0.6528	3.0000e-005		3.6200e-003	3.6200e-003		3.6200e-003	3.6200e-003	0.0000	1.0673	1.0673	1.0200e-003	0.0000	1.0929
Total	**1.0339**	**0.0765**	**2.8748**	**7.4400e-003**		**0.3665**	**0.3665**		**0.3665**	**0.3665**	**48.2297**	**39.1896**	**87.4193**	**0.2272**	**7.0000e-004**	**93.3080**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0196	7.5200e-003	0.6528	3.0000e-005		3.6200e-003	3.6200e-003		3.6200e-003	3.6200e-003	0.0000	1.0673	1.0673	1.0200e-003	0.0000	1.0929
Total	**0.7869**	**7.5200e-003**	**0.6528**	**3.0000e-005**		**3.6200e-003**	**3.6200e-003**		**3.6200e-003**	**3.6200e-003**	**0.0000**	**1.0673**	**1.0673**	**1.0200e-003**	**0.0000**	**1.0929**

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.5646	0.1875	4.4900e-003	15.5899
Unmitigated	9.5646	0.1875	4.4900e-003	15.5899

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	5.73355 / 3.61463	9.5646	0.1875	4.4900e-003	15.5899
Total		**9.5646**	**0.1875**	**4.4900e-003**	**15.5899**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	5.73355 / 3.61463	9.5646	0.1875	4.4900e-003	15.5899
Total		**9.5646**	**0.1875**	**4.4900e-003**	**15.5899**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.4153	1.0883	0.0000	45.6232
Unmitigated	18.4153	1.0883	0.0000	45.6232

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	90.72	18.4153	1.0883	0.0000	45.6232
Total		**18.4153**	**1.0883**	**0.0000**	**45.6232**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	90.72	18.4153	1.0883	0.0000	45.6232
Total		**18.4153**	**1.0883**	**0.0000**	**45.6232**

9.0 Operational Offroad

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

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

KCOK 5/9 Subdivision Map, 2005 BAU

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	88.00	Dwelling Unit	25.87	158,400.00	252

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	7			**Operational Year**	2005
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Established

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - No Demolition Needed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Vehicle Trips -

Woodstoves -

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

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Fleet Mix -

Grading -

On-road Fugitive Dust -

Architectural Coating -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	28.57	25.87
tblWoodstoves	NumberCatalytic	25.87	0.00
tblWoodstoves	NumberNoncatalytic	25.87	0.00

2.0 Emissions Summary

KCOK 5/9 Subdivision Map, 2005 BAU - Tulare County, Annual

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2002	1.4342	8.6636	4.9792	0.0521	0.4395	0.5785	1.0180	0.1929	0.5780	0.7709	0.0000	502.0318	502.0318	0.1153	9.1300e-003	507.6343
2003	1.2623	6.7592	4.0931	0.0423	0.0394	0.5020	0.5413	0.0106	0.5013	0.5119	0.0000	406.2438	406.2438	0.1011	0.0103	411.8512
2004	2.5594	0.5272	0.2736	2.9800e-003	1.9100e-003	0.0335	0.0354	5.1000e-004	0.0335	0.0340	0.0000	28.3975	28.3975	6.6200e-003	3.7000e-004	28.6745
Maximum	**2.5594**	**8.6636**	**4.9792**	**0.0521**	**0.4395**	**0.5785**	**1.0180**	**0.1929**	**0.5780**	**0.7709**	**0.0000**	**502.0318**	**502.0318**	**0.1153**	**0.0103**	**507.6343**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2002	1.4342	8.6636	4.9792	0.0521	0.4395	0.5785	1.0180	0.1929	0.5780	0.7709	0.0000	502.0312	502.0312	0.1153	9.1300e-003	507.6338
2003	1.2623	6.7592	4.0931	0.0423	0.0394	0.5020	0.5413	0.0106	0.5013	0.5119	0.0000	406.2434	406.2434	0.1011	0.0103	411.8508
2004	2.5594	0.5272	0.2736	2.9800e-003	1.9100e-003	0.0335	0.0354	5.1000e-004	0.0335	0.0340	0.0000	28.3975	28.3975	6.6200e-003	3.7000e-004	28.6745
Maximum	**2.5594**	**8.6636**	**4.9792**	**0.0521**	**0.4395**	**0.5785**	**1.0180**	**0.1929**	**0.5780**	**0.7709**	**0.0000**	**502.0312**	**502.0312**	**0.1153**	**0.0103**	**507.6338**

KCOK 5/9 Subdivision Map, 2005 BAU - Tulare County, Annual

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2002**	**3-31-2002**	3.9857	3.9857
2	**4-1-2002**	**6-30-2002**	2.0347	2.0347
3	**7-1-2002**	**9-30-2002**	2.0295	2.0295
4	**10-1-2002**	**12-31-2002**	2.0401	2.0401
5	**1-1-2003**	**3-31-2003**	1.9957	1.9957
6	**4-1-2003**	**6-30-2003**	2.0074	2.0074
7	**7-1-2003**	**9-30-2003**	2.0295	2.0295
8	**10-1-2003**	**12-31-2003**	1.9853	1.9853
9	**1-1-2004**	**3-31-2004**	3.1035	3.1035
		Highest	3.9857	3.9857

KCOK 5/9 Subdivision Map, 2005 BAU - Tulare County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9031	0.0432	0.7718	2.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	39.1896	39.1896	2.4400e-003	7.0000e-004	39.4589
Energy	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	235.4900	235.4900	0.0126	3.3100e-003	236.7923
Mobile	1.6193	3.8851	18.9520	0.0245	0.8665	0.0711	0.9375	0.2323	0.0674	0.2998	0.0000	1,145.9321	1,145.9321	0.1706	0.1346	1,190.3176
Waste						0.0000	0.0000		0.0000	0.0000	18.4153	0.0000	18.4153	1.0883	0.0000	45.6232
Water						0.0000	0.0000		0.0000	0.0000	1.8190	7.7457	9.5646	0.1875	4.4900e-003	15.5899
Total	**2.5336**	**4.0247**	**19.7649**	**0.0254**	**0.8665**	**0.0847**	**0.9512**	**0.2323**	**0.0811**	**0.3134**	**20.2343**	**1,428.3573**	**1,448.5916**	**1.4614**	**0.1431**	**1,527.7819**

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9031	0.0432	0.7718	2.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	39.1896	39.1896	2.4400e-003	7.0000e-004	39.4589
Energy	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	232.8664	232.8664	0.0124	3.2900e-003	234.1552
Mobile	1.6193	3.8851	18.9520	0.0245	0.8665	0.0711	0.9375	0.2323	0.0674	0.2998	0.0000	1,145.9321	1,145.9321	0.1706	0.1346	1,190.3176
Waste						0.0000	0.0000		0.0000	0.0000	18.4153	0.0000	18.4153	1.0883	0.0000	45.6232
Water						0.0000	0.0000		0.0000	0.0000	1.8190	7.7457	9.5646	0.1875	4.4900e-003	15.5899
Total	**2.5336**	**4.0247**	**19.7649**	**0.0254**	**0.8665**	**0.0847**	**0.9512**	**0.2323**	**0.0811**	**0.3134**	**20.2343**	**1,425.7337**	**1,445.9680**	**1.4612**	**0.1431**	**1,525.1447**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.18**	**0.18**	**0.02**	**0.01**	**0.17**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2002	1/28/2002	5	20	
2	Grading	Grading	1/29/2002	4/1/2002	5	45	
3	Building Construction	Building Construction	4/2/2002	12/8/2003	5	440	

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

4	Paving	Paving	12/9/2003	1/26/2004	5	35	
5	Architectural Coating	Architectural Coating	1/27/2004	3/15/2004	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 320,760; Residential Outdoor: 106,920; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

KCOK 5/9 Subdivision Map, 2005 BAU - Tulare County, Annual

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	32.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2002

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1121	0.8032	0.3078	4.5000e-003		0.0505	0.0505		0.0505	0.0505	0.0000	40.0046	40.0046	9.1300e-003	0.0000	40.2329
Total	**0.1121**	**0.8032**	**0.3078**	**4.5000e-003**	**0.1966**	**0.0505**	**0.2470**	**0.1010**	**0.0505**	**0.1515**	**0.0000**	**40.0046**	**40.0046**	**9.1300e-003**	**0.0000**	**40.2329**

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

3.2 Site Preparation - 2002

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5900e-003	6.0600e-003	0.0447	3.0000e-005	1.4300e-003	7.0000e-005	1.5000e-003	3.8000e-004	6.0000e-005	4.4000e-004	0.0000	1.6798	1.6798	3.5000e-004	2.8000e-004	1.7723
Total	**4.5900e-003**	**6.0600e-003**	**0.0447**	**3.0000e-005**	**1.4300e-003**	**7.0000e-005**	**1.5000e-003**	**3.8000e-004**	**6.0000e-005**	**4.4000e-004**	**0.0000**	**1.6798**	**1.6798**	**3.5000e-004**	**2.8000e-004**	**1.7723**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1121	0.8032	0.3078	4.5000e-003		0.0505	0.0505		0.0505	0.0505	0.0000	40.0046	40.0046	9.1300e-003	0.0000	40.2329
Total	**0.1121**	**0.8032**	**0.3078**	**4.5000e-003**	**0.1966**	**0.0505**	**0.2470**	**0.1010**	**0.0505**	**0.1515**	**0.0000**	**40.0046**	**40.0046**	**9.1300e-003**	**0.0000**	**40.2329**

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

3.2 Site Preparation - 2002

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5900e-003	6.0600e-003	0.0447	3.0000e-005	1.4300e-003	7.0000e-005	1.5000e-003	3.8000e-004	6.0000e-005	4.4000e-004	0.0000	1.6798	1.6798	3.5000e-004	2.8000e-004	1.7723
Total	**4.5900e-003**	**6.0600e-003**	**0.0447**	**3.0000e-005**	**1.4300e-003**	**7.0000e-005**	**1.5000e-003**	**3.8000e-004**	**6.0000e-005**	**4.4000e-004**	**0.0000**	**1.6798**	**1.6798**	**3.5000e-004**	**2.8000e-004**	**1.7723**

3.3 Grading - 2002

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3403	2.7395	1.3850	0.0154		0.1445	0.1445		0.1445	0.1445	0.0000	147.2315	147.2315	0.0277	0.0000	147.9231
Total	**0.3403**	**2.7395**	**1.3850**	**0.0154**	**0.2071**	**0.1445**	**0.3516**	**0.0822**	**0.1445**	**0.2267**	**0.0000**	**147.2315**	**147.2315**	**0.0277**	**0.0000**	**147.9231**

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

3.3 Grading - 2002

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0115	0.0152	0.1118	7.0000e-005	3.5800e-003	1.6000e-004	3.7500e-003	9.5000e-004	1.5000e-004	1.1000e-003	0.0000	4.1995	4.1995	8.9000e-004	7.0000e-004	4.4308
Total	**0.0115**	**0.0152**	**0.1118**	**7.0000e-005**	**3.5800e-003**	**1.6000e-004**	**3.7500e-003**	**9.5000e-004**	**1.5000e-004**	**1.1000e-003**	**0.0000**	**4.1995**	**4.1995**	**8.9000e-004**	**7.0000e-004**	**4.4308**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3403	2.7395	1.3850	0.0154		0.1445	0.1445		0.1445	0.1445	0.0000	147.2313	147.2313	0.0277	0.0000	147.9229
Total	**0.3403**	**2.7395**	**1.3850**	**0.0154**	**0.2071**	**0.1445**	**0.3516**	**0.0822**	**0.1445**	**0.2267**	**0.0000**	**147.2313**	**147.2313**	**0.0277**	**0.0000**	**147.9229**

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

3.3 Grading - 2002

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0115	0.0152	0.1118	7.0000e-005	3.5800e-003	1.6000e-004	3.7500e-003	9.5000e-004	1.5000e-004	1.1000e-003	0.0000	4.1995	4.1995	8.9000e-004	7.0000e-004	4.4308
Total	**0.0115**	**0.0152**	**0.1118**	**7.0000e-005**	**3.5800e-003**	**1.6000e-004**	**3.7500e-003**	**9.5000e-004**	**1.5000e-004**	**1.1000e-003**	**0.0000**	**4.1995**	**4.1995**	**8.9000e-004**	**7.0000e-004**	**4.4308**

3.4 Building Construction - 2002

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.8550	4.7297	2.1912	0.0298		0.3718	0.3718		0.3718	0.3718	0.0000	257.6038	257.6038	0.0696	0.0000	259.3447
Total	**0.8550**	**4.7297**	**2.1912**	**0.0298**		**0.3718**	**0.3718**		**0.3718**	**0.3718**	**0.0000**	**257.6038**	**257.6038**	**0.0696**	**0.0000**	**259.3447**

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

3.4 Building Construction - 2002

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.2646	0.1599	1.8900e-003	5.8300e-003	0.0104	0.0162	1.6800e-003	9.9300e-003	0.0116	0.0000	22.0466	22.0466	1.4700e-003	3.2500e-003	23.0525
Worker	0.0799	0.1056	0.7790	4.6000e-004	0.0250	1.1400e-003	0.0261	6.6400e-003	1.0500e-003	7.6900e-003	0.0000	29.2659	29.2659	6.1700e-003	4.8900e-003	30.8780
Total	**0.1107**	**0.3701**	**0.9388**	**2.3500e-003**	**0.0308**	**0.0115**	**0.0423**	**8.3200e-003**	**0.0110**	**0.0193**	**0.0000**	**51.3125**	**51.3125**	**7.6400e-003**	**8.1400e-003**	**53.9305**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.8550	4.7297	2.1912	0.0298		0.3718	0.3718		0.3718	0.3718	0.0000	257.6035	257.6035	0.0696	0.0000	259.3444
Total	**0.8550**	**4.7297**	**2.1912**	**0.0298**		**0.3718**	**0.3718**		**0.3718**	**0.3718**	**0.0000**	**257.6035**	**257.6035**	**0.0696**	**0.0000**	**259.3444**

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

3.4 Building Construction - 2002

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.2646	0.1599	1.8900e-003	5.8300e-003	0.0104	0.0162	1.6800e-003	9.9300e-003	0.0116	0.0000	22.0466	22.0466	1.4700e-003	3.2500e-003	23.0525
Worker	0.0799	0.1056	0.7790	4.6000e-004	0.0250	1.1400e-003	0.0261	6.6400e-003	1.0500e-003	7.6900e-003	0.0000	29.2659	29.2659	6.1700e-003	4.8900e-003	30.8780
Total	**0.1107**	**0.3701**	**0.9388**	**2.3500e-003**	**0.0308**	**0.0115**	**0.0423**	**8.3200e-003**	**0.0110**	**0.0193**	**0.0000**	**51.3125**	**51.3125**	**7.6400e-003**	**8.1400e-003**	**53.9305**

3.4 Building Construction - 2003

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0644	5.8880	2.7278	0.0371		0.4629	0.4629		0.4629	0.4629	0.0000	320.6904	320.6904	0.0867	0.0000	322.8577
Total	**1.0644**	**5.8880**	**2.7278**	**0.0371**		**0.4629**	**0.4629**		**0.4629**	**0.4629**	**0.0000**	**320.6904**	**320.6904**	**0.0867**	**0.0000**	**322.8577**

KCOK 5/9 Subdivision Map, 2005 BAU - Tulare County, Annual

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

3.4 Building Construction - 2003

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0384	0.3294	0.1990	2.3500e-003	7.2600e-003	0.0129	0.0202	2.1000e-003	0.0124	0.0145	0.0000	27.4458	27.4458	1.8300e-003	4.0500e-003	28.6980
Worker	0.0995	0.1314	0.9698	5.7000e-004	0.0311	1.4100e-003	0.0325	8.2700e-003	1.3100e-003	9.5800e-003	0.0000	36.4331	36.4331	7.6900e-003	6.0900e-003	38.4400
Total	**0.1378**	**0.4608**	**1.1687**	**2.9200e-003**	**0.0384**	**0.0143**	**0.0527**	**0.0104**	**0.0137**	**0.0240**	**0.0000**	**63.8789**	**63.8789**	**9.5200e-003**	**0.0101**	**67.1380**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0644	5.8880	2.7278	0.0371		0.4629	0.4629		0.4629	0.4629	0.0000	320.6901	320.6901	0.0867	0.0000	322.8573
Total	**1.0644**	**5.8880**	**2.7278**	**0.0371**		**0.4629**	**0.4629**		**0.4629**	**0.4629**	**0.0000**	**320.6901**	**320.6901**	**0.0867**	**0.0000**	**322.8573**

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

3.4 Building Construction - 2003

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0384	0.3294	0.1990	2.3500e-003	7.2600e-003	0.0129	0.0202	2.1000e-003	0.0124	0.0145	0.0000	27.4458	27.4458	1.8300e-003	4.0500e-003	28.6980
Worker	0.0995	0.1314	0.9698	5.7000e-004	0.0311	1.4100e-003	0.0325	8.2700e-003	1.3100e-003	9.5800e-003	0.0000	36.4331	36.4331	7.6900e-003	6.0900e-003	38.4400
Total	**0.1378**	**0.4608**	**1.1687**	**2.9200e-003**	**0.0384**	**0.0143**	**0.0527**	**0.0104**	**0.0137**	**0.0240**	**0.0000**	**63.8789**	**63.8789**	**9.5200e-003**	**0.0101**	**67.1380**

3.5 Paving - 2003

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0568	0.4062	0.1649	2.2900e-003		0.0247	0.0247		0.0247	0.0247	0.0000	20.4846	20.4846	4.6200e-003	0.0000	20.6002
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0568**	**0.4062**	**0.1649**	**2.2900e-003**		**0.0247**	**0.0247**		**0.0247**	**0.0247**	**0.0000**	**20.4846**	**20.4846**	**4.6200e-003**	**0.0000**	**20.6002**

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

3.5 Paving - 2003

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2500e-003	4.2900e-003	0.0317	2.0000e-005	1.0200e-003	5.0000e-005	1.0600e-003	2.7000e-004	4.0000e-005	3.1000e-004	0.0000	1.1899	1.1899	2.5000e-004	2.0000e-004	1.2554
Total	**3.2500e-003**	**4.2900e-003**	**0.0317**	**2.0000e-005**	**1.0200e-003**	**5.0000e-005**	**1.0600e-003**	**2.7000e-004**	**4.0000e-005**	**3.1000e-004**	**0.0000**	**1.1899**	**1.1899**	**2.5000e-004**	**2.0000e-004**	**1.2554**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0568	0.4062	0.1649	2.2900e-003		0.0247	0.0247		0.0247	0.0247	0.0000	20.4846	20.4846	4.6200e-003	0.0000	20.6002
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0568**	**0.4062**	**0.1649**	**2.2900e-003**		**0.0247**	**0.0247**		**0.0247**	**0.0247**	**0.0000**	**20.4846**	**20.4846**	**4.6200e-003**	**0.0000**	**20.6002**

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

3.5 Paving - 2003

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2500e-003	4.2900e-003	0.0317	2.0000e-005	1.0200e-003	5.0000e-005	1.0600e-003	2.7000e-004	4.0000e-005	3.1000e-004	0.0000	1.1899	1.1899	2.5000e-004	2.0000e-004	1.2554
Total	**3.2500e-003**	**4.2900e-003**	**0.0317**	**2.0000e-005**	**1.0200e-003**	**5.0000e-005**	**1.0600e-003**	**2.7000e-004**	**4.0000e-005**	**3.1000e-004**	**0.0000**	**1.1899**	**1.1899**	**2.5000e-004**	**2.0000e-004**	**1.2554**

3.5 Paving - 2004

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0601	0.4301	0.1746	2.4300e-003		0.0262	0.0262		0.0262	0.0262	0.0000	21.6896	21.6896	4.9000e-003	0.0000	21.8120
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0601**	**0.4301**	**0.1746**	**2.4300e-003**		**0.0262**	**0.0262**		**0.0262**	**0.0262**	**0.0000**	**21.6896**	**21.6896**	**4.9000e-003**	**0.0000**	**21.8120**

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

3.5 Paving - 2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4400e-003	4.5400e-003	0.0335	2.0000e-005	1.0800e-003	5.0000e-005	1.1200e-003	2.9000e-004	5.0000e-005	3.3000e-004	0.0000	1.2599	1.2599	2.7000e-004	2.1000e-004	1.3293
Total	**3.4400e-003**	**4.5400e-003**	**0.0335**	**2.0000e-005**	**1.0800e-003**	**5.0000e-005**	**1.1200e-003**	**2.9000e-004**	**5.0000e-005**	**3.3000e-004**	**0.0000**	**1.2599**	**1.2599**	**2.7000e-004**	**2.1000e-004**	**1.3293**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0601	0.4301	0.1746	2.4300e-003		0.0262	0.0262		0.0262	0.0262	0.0000	21.6895	21.6895	4.9000e-003	0.0000	21.8119
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0601**	**0.4301**	**0.1746**	**2.4300e-003**		**0.0262**	**0.0262**		**0.0262**	**0.0262**	**0.0000**	**21.6895**	**21.6895**	**4.9000e-003**	**0.0000**	**21.8119**

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

3.5 Paving - 2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4400e-003	4.5400e-003	0.0335	2.0000e-005	1.0800e-003	5.0000e-005	1.1200e-003	2.9000e-004	5.0000e-005	3.3000e-004	0.0000	1.2599	1.2599	2.7000e-004	2.1000e-004	1.3293
Total	**3.4400e-003**	**4.5400e-003**	**0.0335**	**2.0000e-005**	**1.0800e-003**	**5.0000e-005**	**1.1200e-003**	**2.9000e-004**	**5.0000e-005**	**3.3000e-004**	**0.0000**	**1.2599**	**1.2599**	**2.7000e-004**	**2.1000e-004**	**1.3293**

3.6 Architectural Coating - 2004

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.4779					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.0891	0.0394	5.2000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003	0.0000	4.4682	4.4682	1.2500e-003	0.0000	4.4995
Total	**2.4932**	**0.0891**	**0.0394**	**5.2000e-004**		**7.2400e-003**	**7.2400e-003**		**7.2400e-003**	**7.2400e-003**	**0.0000**	**4.4682**	**4.4682**	**1.2500e-003**	**0.0000**	**4.4995**

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

3.6 Architectural Coating - 2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6800e-003	3.5300e-003	0.0261	2.0000e-005	8.4000e-004	4.0000e-005	8.7000e-004	2.2000e-004	4.0000e-005	2.6000e-004	0.0000	0.9799	0.9799	2.1000e-004	1.6000e-004	1.0339
Total	**2.6800e-003**	**3.5300e-003**	**0.0261**	**2.0000e-005**	**8.4000e-004**	**4.0000e-005**	**8.7000e-004**	**2.2000e-004**	**4.0000e-005**	**2.6000e-004**	**0.0000**	**0.9799**	**0.9799**	**2.1000e-004**	**1.6000e-004**	**1.0339**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.4779					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.0891	0.0394	5.2000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003	0.0000	4.4682	4.4682	1.2500e-003	0.0000	4.4995
Total	**2.4932**	**0.0891**	**0.0394**	**5.2000e-004**		**7.2400e-003**	**7.2400e-003**		**7.2400e-003**	**7.2400e-003**	**0.0000**	**4.4682**	**4.4682**	**1.2500e-003**	**0.0000**	**4.4995**

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

3.6 Architectural Coating - 2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6800e-003	3.5300e-003	0.0261	2.0000e-005	8.4000e-004	4.0000e-005	8.7000e-004	2.2000e-004	4.0000e-005	2.6000e-004	0.0000	0.9799	0.9799	2.1000e-004	1.6000e-004	1.0339
Total	**2.6800e-003**	**3.5300e-003**	**0.0261**	**2.0000e-005**	**8.4000e-004**	**4.0000e-005**	**8.7000e-004**	**2.2000e-004**	**4.0000e-005**	**2.6000e-004**	**0.0000**	**0.9799**	**0.9799**	**2.1000e-004**	**1.6000e-004**	**1.0339**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6193	3.8851	18.9520	0.0245	0.8665	0.0711	0.9375	0.2323	0.0674	0.2998	0.0000	1,145.9321	1,145.9321	0.1706	0.1346	1,190.3176
Unmitigated	1.6193	3.8851	18.9520	0.0245	0.8665	0.0711	0.9375	0.2323	0.0674	0.2998	0.0000	1,145.9321	1,145.9321	0.1706	0.1346	1,190.3176

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	830.72	839.52	752.40	2,313,585	2,313,585
Total	830.72	839.52	752.40	2,313,585	2,313,585

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	38.40	22.60	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.445143	0.090887	0.165130	0.187970	0.045320	0.007055	0.014780	0.012618	0.000711	0.000220	0.019746	0.001150	0.009270

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	121.2749	121.2749	0.0102	1.2400e-003	121.9005
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	123.8985	123.8985	0.0105	1.2700e-003	124.5377
NaturalGas Mitigated	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546
NaturalGas Unmitigated	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546

KCOK 5/9 Subdivision Map, 2005 BAU - Tulare County, Annual

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	2.09115e+006	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546
Total		**0.0113**	**0.0964**	**0.0410**	**6.2000e-004**		**7.7900e-003**	**7.7900e-003**		**7.7900e-003**	**7.7900e-003**	**0.0000**	**111.5915**	**111.5915**	**2.1400e-003**	**2.0500e-003**	**112.2546**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	2.09115e+006	0.0113	0.0964	0.0410	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003	0.0000	111.5915	111.5915	2.1400e-003	2.0500e-003	112.2546
Total		**0.0113**	**0.0964**	**0.0410**	**6.2000e-004**		**7.7900e-003**	**7.7900e-003**		**7.7900e-003**	**7.7900e-003**	**0.0000**	**111.5915**	**111.5915**	**2.1400e-003**	**2.0500e-003**	**112.2546**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	698628	123.8985	0.0105	1.2700e-003	124.5377
Total		**123.8985**	**0.0105**	**1.2700e-003**	**124.5377**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	683834	121.2749	0.0102	1.2400e-003	121.9005
Total		**121.2749**	**0.0102**	**1.2400e-003**	**121.9005**

6.0 Area Detail

6.1 Mitigation Measures Area

KCOK 5/9 Subdivision Map, 2005 BAU - Tulare County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9031	0.0432	0.7718	2.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	39.1896	39.1896	2.4400e-003	7.0000e-004	39.4589
Unmitigated	0.9031	0.0432	0.7718	2.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	39.1896	39.1896	2.4400e-003	7.0000e-004	39.4589

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2478					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8500e-003	0.0329	0.0140	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	38.1223	38.1223	7.3000e-004	7.0000e-004	38.3488
Landscaping	0.0328	0.0103	0.7578	3.0000e-005		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	1.0673	1.0673	1.7100e-003	0.0000	1.1101
Total	**0.9031**	**0.0432**	**0.7718**	**2.4000e-004**		**5.8600e-003**	**5.8600e-003**		**5.8600e-003**	**5.8600e-003**	**0.0000**	**39.1896**	**39.1896**	**2.4400e-003**	**7.0000e-004**	**39.4589**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2478					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8500e-003	0.0329	0.0140	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	38.1223	38.1223	7.3000e-004	7.0000e-004	38.3488
Landscaping	0.0328	0.0103	0.7578	3.0000e-005		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	1.0673	1.0673	1.7100e-003	0.0000	1.1101
Total	**0.9031**	**0.0432**	**0.7718**	**2.4000e-004**		**5.8600e-003**	**5.8600e-003**		**5.8600e-003**	**5.8600e-003**	**0.0000**	**39.1896**	**39.1896**	**2.4400e-003**	**7.0000e-004**	**39.4589**

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.5646	0.1875	4.4900e-003	15.5899
Unmitigated	9.5646	0.1875	4.4900e-003	15.5899

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	5.73355 / 3.61463	9.5646	0.1875	4.4900e-003	15.5899
Total		**9.5646**	**0.1875**	**4.4900e-003**	**15.5899**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	5.73355 / 3.61463	9.5646	0.1875	4.4900e-003	15.5899
Total		**9.5646**	**0.1875**	**4.4900e-003**	**15.5899**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.4153	1.0883	0.0000	45.6232
Unmitigated	18.4153	1.0883	0.0000	45.6232

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	90.72	18.4153	1.0883	0.0000	45.6232
Total		**18.4153**	**1.0883**	**0.0000**	**45.6232**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	90.72	18.4153	1.0883	0.0000	45.6232
Total		**18.4153**	**1.0883**	**0.0000**	**45.6232**

9.0 Operational Offroad

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

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Biological Evaluation

Biological Resource Assessment

KCOK Phase 9 Housing Development Project
Assessor Parcel Number 172-010-047
Fresno, CA

Prepared for

4CREEKS

324 South Santa Fe Street, Suite A
Visalia, CA 93292

Prepared by

SOAR ENVIRONMENTAL CONSULTING

1401 Fulton St, Suite 918
Fresno, CA 93721

January 20, 2022

Executive Summary

As lead agency, the City of Tulare has tasked 4Creeks, Inc. (4Creeks) to provide a Biological Resource Assessment (BRA), for the new construction on the KCOK Phase 9 Housing Development Project (Project) within the City of Tulare (City) in accordance with the California Environmental Quality Act (CEQA) prior to implementation of the proposed Project. 4Creeks has tasked Soar Environmental Consulting Inc. (Soar Environmental) to provide the BRA. The proposed housing project is a subdivision of approximately 12 acres of land with 88 units slated for construction. Located at the intersection of Seminole Avenue and Spyglass Street in the City of Tulare, County of Tulare, California, APN 172-010-047. Soar Environmental prepared this BRA for 4Creeks in support of California Environmental Quality Act requirements.

The objectives of this Assessment were to: 1) provide a general characterization of biological resources for the property; 2) inventory plant and wildlife species; 3) evaluate the potential for federal or state listed plants and animals species afforded other special regulatory protection; and 4) describe the property's sensitive biological resources and applicable federal, state, and local land use policies.

This BRA provides information about the biological resources within the Project area. Prior to field activities, Soar Environmental researched the California Natural Diversity Database (CNDDB) and the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, to compile a list of special-status species that could potentially be present in the vicinity of the Project Area. Soar Environmental researched specific species and habitat requirements for the species noted in the CNDDB, IPaC and CNPS databases and included species listing status, and proximal species observations in this report.

During the habitat assessment performed on January 20, 2022, a single western burrowing owl (*Athene cunicularia*) was observed on the north side of the project site. This and other special-status wildlife species that have potential to occur in the Project area based on presence of suitable habitat and/or documented occurrences in the vicinity include:

- Western burrowing owl (*Athene cunicularia*)
- San Joaquin kit fox (*Vulpes macrotis mutica*)
- Swainson's hawk (*Buteo swainsoni*)
- California Jewelflower (*Caulanthus californicus*)
- San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

Suitable habitat for western burrowing owl is present on and within the surrounding area of the project site. All other special status species identified in the record search are unlikely to occur in the vicinity of the Project site, due to lack of suitable habitat and proximity of known occurrences. Soar Environmental Consulting, Inc. recommends the following mitigation measures to minimize disturbance to western burrowing owl:

Mitigation Measure BIO-1: Take Avoidance of Burrowing Owls – Preconstruction Survey
No less than 14 days prior to initiating ground disturbance activities.

Mitigation Measure BIO-2: Avoidance of Active Nests and Roosts

- Option A: Disturbance-Free Buffer around Active Nest Burrows – Bio Monitoring
- Option B: Passive Relocation of Resident Owls

*(*see section 6.1 Recommended Mitigation Measures*)

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1. Introduction

The proposed housing project is a subdivision of approximately 12 acres of land with 88 units slated for construction. 4Creeks has tasked Soar Environmental Consulting (Soar) with providing a Biological Resource Assessment (BRA) in accordance with the California Environmental Quality Act (CEQA) within the City of Fresno, California. The Project site is a flat grass field in which an apartment complex would be constructed, mainly on the south and southeast side of Assessor Parcel Number (APN) 172-010-047 in the city of Tulare. Soar Environmental Consulting, Inc. (Soar Environmental) prepared this BRA for 4Creeks in support of the CEQA requirements.

Based on a review of CNDDB database research it was determined that a Habitat Assessment was necessary to search for the potential suitable habitat or presence for the 8 following special-status wildlife species: blunt-nosed leopard lizard, San Joaquin kit fox, Tipton kangaroo rat, Swainson's hawk, tricolored blackbird, valley elderberry longhorn beetle, vernal pool fairy shrimp, and western yellow-billed cuckoo.

A review of the CNPS Inventory of Rare and Endangered Plants of California identified the following 5 sensitive plant species historically occurring in the vicinity of the Project Site: California jewelflower, Hoover's spurge, San Joaquin adobe sunburst, and San Joaquin valley orcutt grass.

A review of the IPaC database for federally protected species, indicated 13 additional special-status plant and wildlife species potentially in the vicinity of the project area as follows: fisher, California condor, California red-legged frog, California tiger salamander, conservancy fairy shrimp, delta smelt, Fresno kangaroo rat, giant garter snake, monarch butterfly, vernal pool tadpole shrimp, Hoover's spurge, San Joaquin adobe sunburst, and San Joaquin orcutt grass.

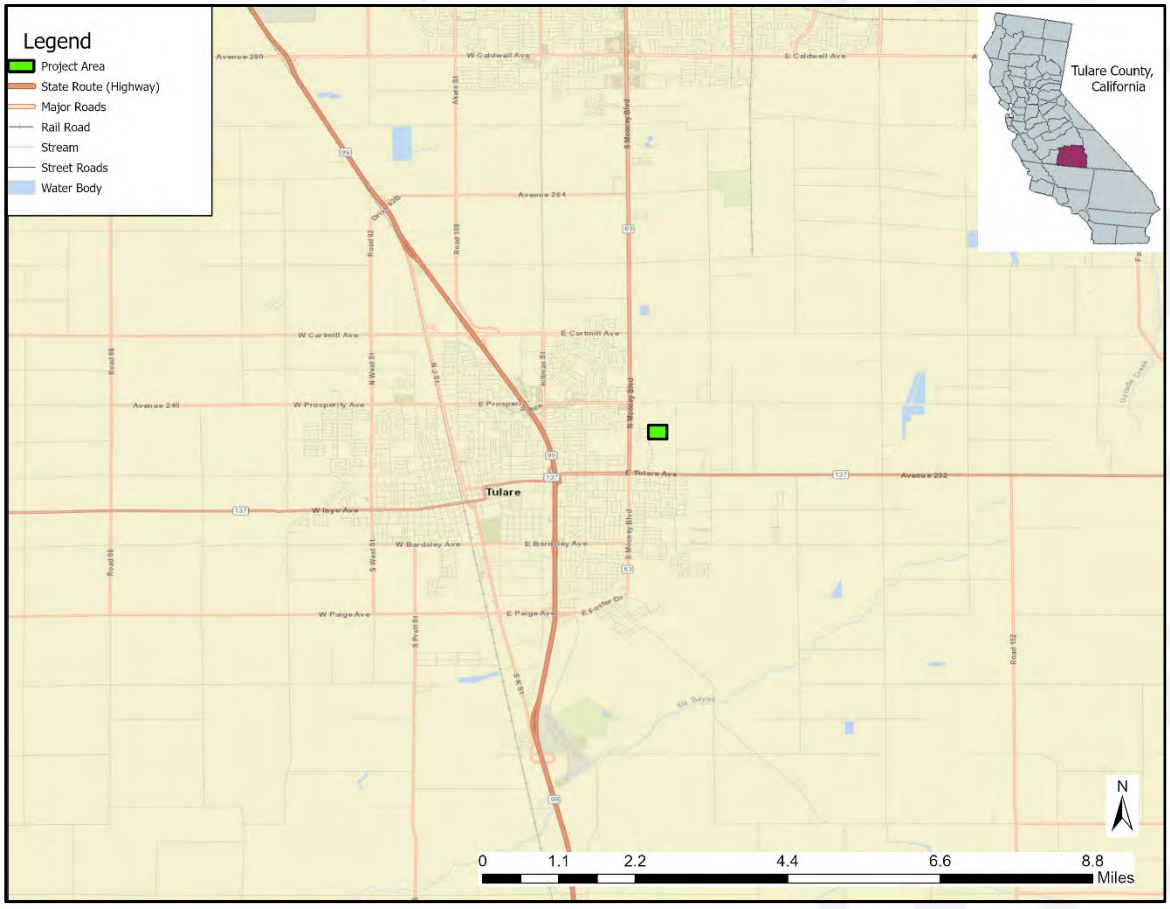
On January 20, 2022, a Habitat Assessment was conducted in the project area by Soar Environmental biologist Travis Albert. The purpose of the Habitat Assessment Survey was to search for the presence of special-status species that have historically been observed within, or surrounding, the Project area. During the habitat assessment none of the aforementioned species from the data record search were observed in the vicinity of the Project site. However, a western burrowing owl (*Athene cunicularia hypugaea*) was observed roosting in the vicinity of the project site. Two active burrowing owl dens were identified approximately 164 feet from where Phase 9 construction is proposed to take place. The burrowing owl is listed under the MTBA as a Bird of Conservation Concern (BCC), and listed by the state of California as Vulnerable (S3) which puts it at risk of extirpation in the state due to a fairly restricted range, population declines, threats, or other factors.

1.1 Project Location

The Project site is at the northeast corner of Spyglass Street and Seminole Avenue, on the western outskirts of the City approximately 0.5 mile north of State Route 137, and 1.25 mile east of State Route 99. Located in the *Tulare* USGS 7.5 minute quadrangle at Township 20 S., Range 25 E., section 6. Phase 9 construction is proposed to occur on approximately 12 acres of the property located along the southern

boundary of Assessor Parcel Number APN 172-010-047, excluding a buffered area around the city retention pond adjacent to the southwest corner of the property.

Figure 1. Project Location



1.2 Environmental Setting

The Project site is an open grass field dominated by a single species of grass in the *Poaceae* family, with Russian thistle (*Salsola kali*) sparsely scattered around the area. Land use in the area is residential and agricultural. The topography is flat at an elevation of approximately 300 feet above mean sea level. There are no trees or bushes on the Project site. A city stormwater retention pond is located in the southwest corner of the property, surrounded by a chain link fence (**Photo 10**). The Santa Fe trail runs along an irrigation canal located to the northwest. There is a residential neighborhood to the west, the Project site is otherwise surrounded by grassy agricultural fields, with dirt roads crisscrossing around the perimeters of the surrounding fields. These dirt roads were being used as dog walking paths by the local residents.

Due to a high level of disturbance, urbanization, and agricultural practices, habitat conditions do not appear to be conducive for the listed plant species in this report. There are several active ground squirrel burrows within the Project area, two of which appear to be occupied by western burrowing owl (Athene cunicularia hypugaea) (**Photos 14**). For aerial imagery of the Project site see; **Photo 1** (**Appendix A**).

Figure 1 – Project Site Boundary

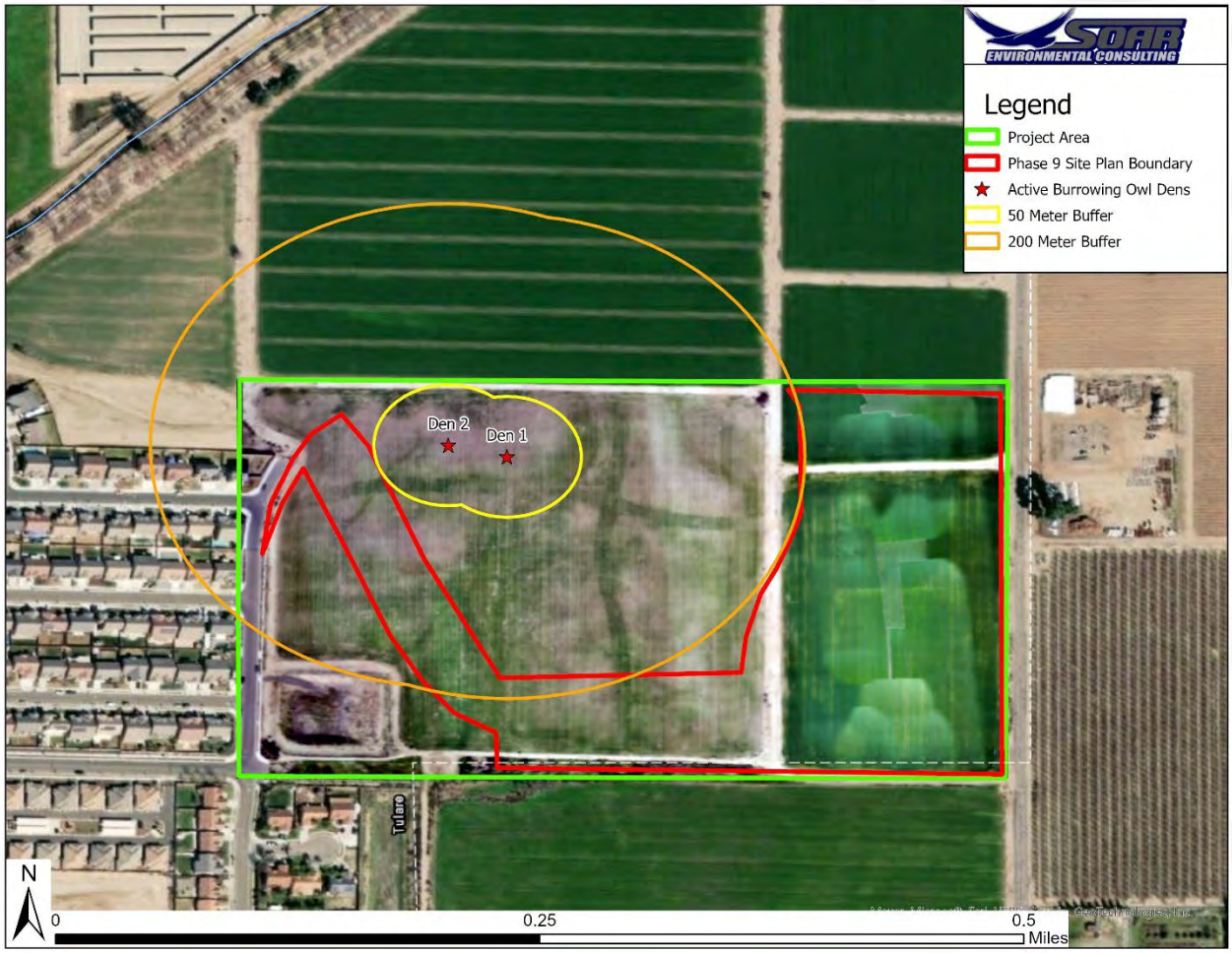
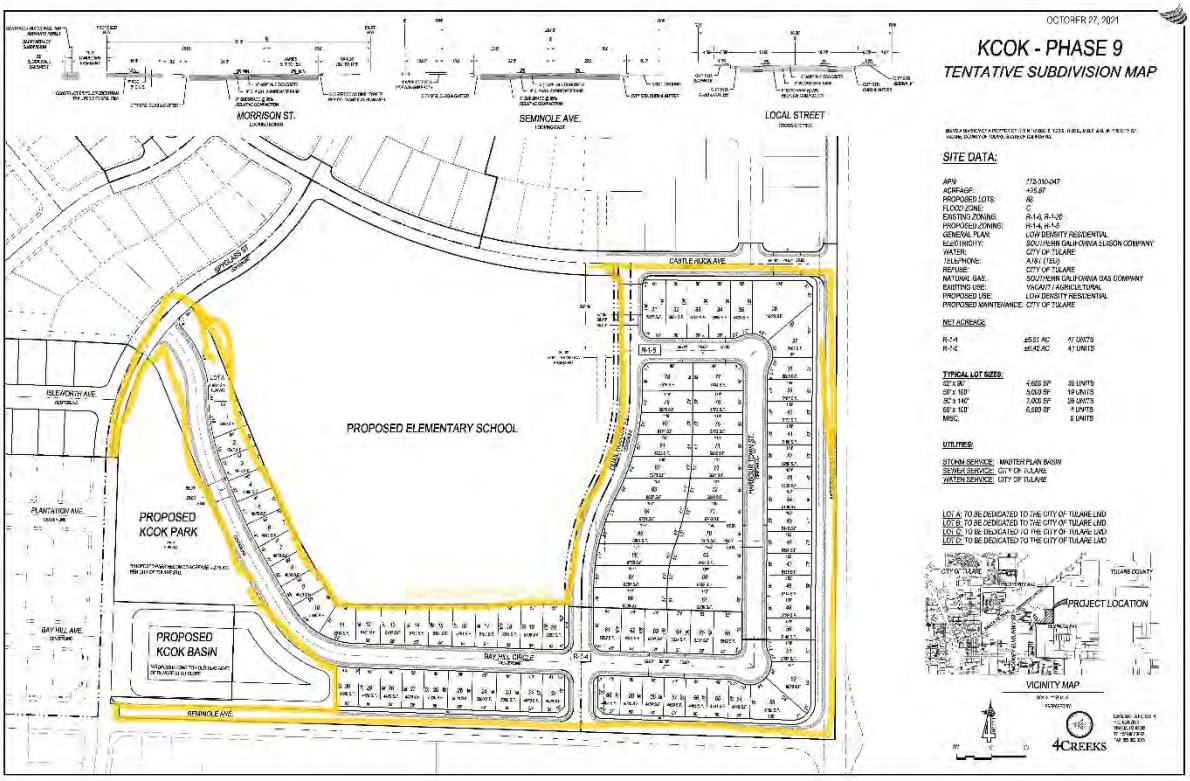


Figure 3 – Site Plan



2. Methods

2.1 Literature Review

Prior to performing the Habitat Assessment, Soar Environmental conducted a records search for threatened or endangered species that could potentially occur in the vicinity of the Project area. The records search included a review of the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), and California Native Plant Society (CNPS) Online Rare Plant Inventory. The area covered by the data records search included USGS 7.5 minute quadrangles of *Tulare, Cairns Corner, Exeter, Goshen, Paige, Taylor Weir, Tipton, Visalia,* and *Woodville* 7.5-minute USGS quadrangles. From these sources a list of special-status plant and animal species was generated. Proximal locations of special-status plant and animal species located within 5 miles of the Project site are shown in (**Figure 4**).

The CNDDB records search indicated 8 State-listed special-status wildlife species most likely to occur within or near the Project Site would include:

- Blunt-nosed leopard lizard (*Gambelia sila*)
- San Joaquin kit fox (*Vulpes macrotis mutica*)
- Swainson's hawk (*Buteo swainsoni*)
- Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)
- Tricolored blackbird (*Agelaius tricolor*)
- Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)
- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Western yellow-billed cuckoo (Coccyzus americanus occidentalis)

The IPaC search identified 13 additional Federally listed special-status species likely to occur within or near the Project Site including:

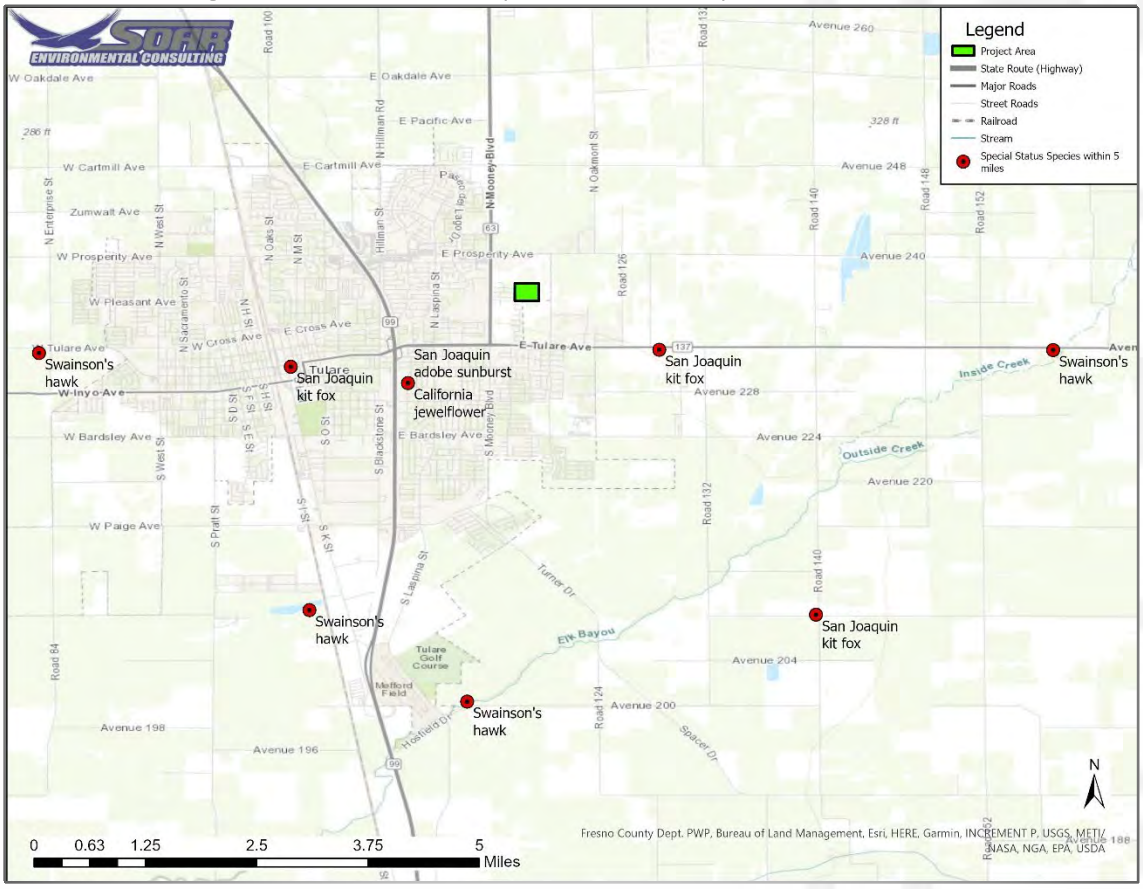
- Fisher (Pekania pennanti)
- California condor (*Gymnogyps californianus*)
- California red-legged frog (*Rana draytonii*)
- California tiger salamander (*Ambystoma californiense*)
- Conservancy fairy shrimp (*Branchinecta conservatio*)
- Delta smelt (*Hypomesus transpacificus*)
- Fresno kangaroo rat (*Dipodomys nitratoides exilis*)
- Giant garter snake (*Thamnophis gigas*)
- Monarch butterfly (*Danaus plexippus*)
- Vernal pool tadpole shrimp (*Lepidurus packardi*)
- Hoover's spurge (Chamaesyce hooveri)
- San Joaquin adobe sunburst (Pseudobahia peirsonii)
- San Joaquin orcutt grass (Orcuttia inaequalis)

A search of the California Native Plant Society (CNPS) Online Rare Plant Inventory identified the following 2 special-status plant species likely to occur within or proximate to the Project Site:

- California Jewelflower (*Caulanthus californicus*)
- San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

Closest and most recent occurrences of special-status species from the data records search are shown in (**Figure 4**).

Figure 4 – Historical Special-Status Species Locations



and CNPS Online Rare Plant Inventory

2.2 Field Reconnaissance Methodology

On January 20, 2022, Soar Environmental biologist Travis Albert conducted a Habitat Assessment on the property for the above mentioned species. Walking the perimeter of the property, and meandering transects throughout the Project site, the surveyor searched for signs of vernal pools, bird nests, possible small mammal dens, identified vegetation, and looked for other signs of wildlife occupancy and suitable habitat. Survey efforts emphasized the search for special-status species that had documented occurrences in the data records search of the CNDDB, IPaC, and CNPS databases. Photos were taken of the Project boundaries (**Photos 2-5**), and center of the Project site in four cardinal directions depicting the habitat (**Photos 6- 9**). After surveying the Project Site, the surveyor drove the roads within 0.5 mile surrounding the Project footprint searching for signs of special-status species and potentially active nests, or vernal pools. No active nests, vernal pools, or special-status species were observed. A single burrowing owl and 2 active burrowing owl dens were observed on the north side of the project site approximately 164 feet from where phase 9 construction activities will occur. No other special-status species were

observed during the Habitat Assessment. Drone imagery of the Project site was taken on January 17, 2022, shown in (**Appendix A, Photo 1**).

3. Habitat Assessment Results

During the field reconnaissance, a western burrowing owl (Athene cunicularia hypugaea) was observed roosting by a small mammal burrow located at (**36.220776, -119.307144; Photo 11, Den 1**). Another active den site was located approximately 133 feet, at 285° west from the first den location; Den 2 located at (**36.220862, -119.307582; Photo 12, Den 2**). During approximately 20 minutes of observation a burrowing owl was standing at the opening of Den 1, and flew short distances within the grass field of the Project site. Both active den sites had whitewash around the opening. Ground squirrels were also observed using other burrows in the same grassy field. Pray remains of a ground squirrel, and juvenile redtailed hawk were found on the property. Several common bird species were observed in the area listed in (**Table 1**).

A city stormwater retention pond is located in the southwest corner of the property, surrounded by a chain link fence (**Photo 10**). An irrigation canal is located 0.13 miles from the northwest corner of the project boundary, no other water features were observed in the vicinity of the Project site. Ground cover is a monoculture of grass, and the ground is flat with no vernal pools or swales.

The Habitat Assessment was conducted outside the blooming period for the special status plant species listed in (**Table 3**). Regardless, no special-status plant species were observed on the Project site. Ground cover is dominated by a single species of grass in the Poaceae family. Russian thistle (*Salsola kali*), an invasive weed is sparsely scattered around the area. Due to a high level of disturbance, urbanization, and past agricultural practices, habitat conditions do not appear to be conducive for the listed plant species in this report.

Table 1– Species Observed on the Project Site

Wildlife Species Observed	Listing Status
Western burrowing owl (*Athene cunicularia hypugaea*)	MTBA, BCC
California scrub jay (*Aphelocoma californica*)	MTBA
Eurasian collared dove (*Streptopelia decaocto*)	None
Great egret (*Ardea alba*)	MTBA
Ground squirrels (*Spermaphilus beecheyi*)	None

Rock Pigeon (*Columba livia*)	None
Song sparrow (*Melospiza melodia*)	MTBA
Plant Species Observed	**Listing Status**
Unidentified grass (*Poaceae* family)	None
Russian thistle (*Salsola kali*)	None

4. Special-Status Species

Special-status plants and animals that have a reasonable possibility to occur in the Project area based on habitat suitability and requirements, elevation and geographic range, soils, topography, surrounding land uses, and proximity of known occurrences in the CNDDB, IPaC, and CNPS databases to the Project area are listed in **Tables 2 and 3**. The likelihood for occurrence of special-status species was assessed using information from the various listed sources, wildlife and botanical surveys. Narratives are provided for species for which there are land use planning and regulatory implications. Special-status species for which there are no habitat features are excluded from consideration due to the lack of suitable habitat and distance from the subject property.

Based upon a review of the resources and databases listed in Section 2.1 (Literature Review) for the *Tulare, Cairns Corner, Exeter, Goshen, Paige, Taylor Weir, Tipton, Visalia,* and *Woodville* USGS 7.5-minute quadrangles; it was determined that 24 special-status species have been documented in the vicinity of the Project area. Of these 24 special-status species, 5 were determined to have potential for occurrence.

Species with Potential for Occurrence:

- Western burrowing owl (*Athene cunicularia*)
- San Joaquin kit fox (*Vulpes macrotis mutica*)
- Swainson's hawk (*Buteo swainsoni*)
- California Jewelflower (*Caulanthus californicus*)
- San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

Special-status species and sensitive habitats include plant and wildlife taxa, or other unique biological features that are afforded special protection by local land use policies, state and federal regulations. Special-status plant and animal species are those that are listed as rare, threatened, or endangered under the state or federal Endangered Species Acts. Vegetation communities may warrant special-status if they are of limited distribution, have high wildlife value, or are particularly vulnerable to disturbance. Listed and special-status species are defined as:

- Listed or proposed for listing under the state or Federal Endangered Species acts.

- Protected under other regulations (e.g., Migratory Bird Treaty Act).
- CDFG Species of Special Concern.
- Listed as species of concern by CNPS or USFWS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on field survey results, review of the CNDDB occurrence records of species, review of the USFWS lists for special-status species occurring in the region, and CNPS literature (**Tables 2 and 3**).

- **Present**: Species known to occur on the site, based on CNDDB records, and/or was observed on the site during the field survey.
- **High**: Species known to occur on or near the site (based on CNDDB records within 8 km or 5 mi) and there is suitable habitat on the site.
- **Low**: Species known to occur in the vicinity of the site, and there is marginal habitat onsite. -**OR**- Species is not known to occur in the vicinity of the site, however there is suitable habitat on the site.
- **None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site. -**OR**- Species was surveyed for during the appropriate season with negative results.

Table 2 – Listed Special-Status Wildlife Species Potentially Occurring on Site or in the Vicinity

Common/ Scientific Name	Listing Status*	Habitat Requirements	Potential for Occurrence
Amphibians			
California red-legged frog (*Rana draytonii*)	FT, SSC	Standing waters and freshwater marshes, wetland. Forest, scrub, and woodland riparian areas. Requires a breeding pond, slow-flowing stream.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
California tiger salamander (*Ambystoma californiense*)	FT, ST	Grasslands, oak savannah riparian woodlands and lower elevations of coniferous forests, ditches, vernal pools, and wetlands.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Birds			
Western burrowing owl (*Athene cunicularia hypugaea*)	MBTA, BCC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	**Present**: Species was observed on the site during the field survey.

		Subterranean nester, dependent upon burrowing mammals.	
California condor (*Gymnogyps californianus*)	FE, SE, FP, MBTA, WL	Savannah, grasslands, chaparral, foothills. Deep canyons containing clefts in the provide nesting sites.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Swainson's hawk (*Buteo swainsoni*)	ST, MBTA	Agricultural fields, grasslands Nests in isolated trees or riparian woodlands adjacent to suitable foraging habitat.	**Low**: Species known to occur in the vicinity of the site, and there is marginal habitat onsite.
Tricolored blackbird (*Agelaius tricolor*)	ST, BCC, MBTA	Found in areas near water, such as marshes, grasslands, and wetlands. They require some sort of substrate nearby to build nests.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, SE, MBTA	Woodlands near streams or lakes, abandoned farmland, old fruit orchards, successional shrubland and dense thickets.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Invertebrates			
Conservancy fairy shrimp (*Branchinecta conservatio*)	FE	Inhabit large, cool-water vernal pools from early November to early April, which fill with water in the rainy season, then slowly dry up.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Monarch butterfly (*Danaus plexippus*)	FC	Closed-cone coniferous forest. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Occurs only in the Central Valley of California, in association with blue elderberry (Sambucus mexicana), in riparian scrub	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.

Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Grasslands, vernal pools, and wetlands.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	Vernal pools and swales containing clear to highly turbid water. Pools commonly found in grass-bottomed or mud-bottomed swales.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Mammals			
Fisher (*Pekania pennanti*)	FE, ST, SSC	Coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for denning.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	FE, SE	Chenopod scrub, grassland habitats, bare alkaline clay-based soils, with friable soil mounds around shrubs and grasses.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	FE, SE	Occurs in chenopod scrub and alkaline grassland with seed sources for forage. Nests in mounds.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, SE	Arid flat grasslands, scrublands, and alkali meadows with short vegetation.	**Low**: Species known to occur in the vicinity of the site, and there is marginal habitat onsite.
Fishes			
Delta smelt (*Hypomesus transpacificus*)	FT	Shallow, fresh, or slightly brackish backwater sloughs and edge waters, with good water quality and substrate for spawning.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.
Reptiles			
Blunt-nosed leopard lizard (*Gambelia sila*)	FE, SE	Semi-arid grasslands, alkali flats, and washes, utilize shrubs and small mammal burrows.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.

Giant gartersnake (*Thamnophis gigas*)	FT, ST	Marshes, sloughs, drainage canals, irrigation ditches, and prefers locations with vegetation close to water for basking.	**None**: Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species on the site.

*Listing Status Notes:
Federal: FE – Federally listed Endangered
FT – Federally listed Threatened
FC – Federal Candidate Species
WL – USFWS Watch list
BCC – USFWS Bird of Conservation Concern
MTBA – Migratory Bird Treaty Act
State: SE – State listed Endangered
ST – State listed Threatened
SC – State Candidate Species
SR – State Rare Species
SA – State Special Animal
FP – CDFW Fully Protected Species
SSC – CDFW Species of Special Concern
WL – CDFW Watch List

Table 3 – Listed Special-Status Plant Species Potentially Occurring on Site or in the Vicinity

Common/ Scientific Name	*Status Fed/CA/CNPS/ Bloom Period	Habitat Description	Habitat Present/ Absent
California jewelflower (*Caulanthus californicus*)	FE/CE/1B.1/ Feb-May	Chenopod scrub, Pinyon-Juniper woodland, valley and foothill grassland (61- 1000 m; 200 -3280 ft)	Absent
Hoover's spurge (*Euphorbia hooveri*)	1B.2/ June-Oct	Vernal pools/<800 ft elevaiton	Absent
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT/CE/1B.1/ Feb-Apr	Cismontane woodland, valley and foothill grassland, adobe clay	Absent
San Joaquin valley orcutt grass (*Orcuttia inaequalis*)	FT/CE/1B.1/ Apr-Sep	Vernal pools (10 -755 m; 35 - 2475 ft)	Absent

*Federal: FE – Federally listed Endangered
FT – Federally listed Threatened

FC – Federal Candidate Species
State: SE – State listed Endangered
ST – State listed Threatened
SC – State Candidate Species
SR – State Rare Species
CRPR: California Native Plant Society Rare Plant Rank
CBR – Considered but Rejected
1B – Rare, threatened, or endangered in CA and elsewhere
2 – Rare, threatened, or endangered in CA but common elsewhere
4 – Limited distribution (Watch-list)
CBR – Considered but Rejected
CRPR Extensions 0.1 – Seriously endangered in California
0.2 – Fairly endangered in California
0.3 – Not very endangered in California

4.1 Special-Status Wildlife Species Descriptions

This section describes identifiable physical characteristics and habitat requirements for special-status species identified in the CNDDB records search that were within 5 miles of the Project site.

4.1.1 Western burrowing owl (*Athene cunicularia*)

The burrowing owl is federally protected by the Migratory Bird Treaty Act of 1918 in the United States, Canada and Mexico. They are considered by the U.S. Fish and Wildlife Service (USFWS) to be a Bird of Conservation Concern (BCC). These small owls are between 7.5 to 10 inches tall with a wingspan of 21 to 24 inches. They weigh between 4.5 to 9 ounces. They have yellow eyes arched by white eyebrows and no ear tufts. Adult plumage is brown with barred stripes on the chest, a white chin stripe and spots on the back. Juveniles have no bars on the chest and few spots on the back. Unlike most owls, burrowing owl males are slightly heavier than females and have a longer wingspan.

Burrowing owls typically breed from mid-March through August. If owls are nesting, the site must be avoided until the chicks have fledged or it has been determined the nest has failed. Chicks may appear at the burrow entrance when they are about 10 days old. Usually nesting in abandoned ground squirrel burrows, the nest chamber might be lined with excrement, pellets, debris, grass, feathers; sometimes unlined. General habitat includes open dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.

4.1.2 San Joaquin Kit Fox ((*Vulpes macrotis mutica*)

The San Joaquin kit fox is listed as Threatened at the Federal level and Endangered at the State level. Kit fox are petite, light-colored canids, approximately 50 centimeters (20 inches) in length, with bushy, black-tipped tails, large ears, and pointed snouts. This species typically inhabits alkali meadows, playas, grassland communities, scrubland, and wetland communities in the San Joaquin Valley and adjoining foothills. San Joaquin kit fox have adapted to human habitation and can also be found in more developed areas such as golf courses, airports, and residential areas.

San Joaquin kit fox are denning mammals. A typical den is anywhere from 4 to 10 inches in diameter, and is taller than it is wide, often with a keyhole shape. Kit fox dens usually have dirt berms and matted vegetation adjacent to the entrances, and tracks and prey remains will normally be detected nearby. This species may also utilize man-made structures such as pipes and culverts as dens.

4.1.3 Swainson's Hawk (*Buteo swainsonii*)

Swainson's hawk is listed as Threatened on the State level. SWHA favor open habitat for foraging such as agricultural fields, pastures, and row crops. They nest in scattered stands of eucalyptus, willow, oak, cottonwood, and conifers. On occasion, SWHA will nest on a power pole or transmission tower. Nests are constructed with loose bundles of sticks and debris items. Incubation period is approximately 35 days and nesting period is 17-22 days. The breeding season for this species begins in March and ends in September.

4.1.4 California jewelflower (*Caulanthus californicus*)

California jewelflower is listed as Endangered on the Federal level and Endangered on the State level. This is an annual herb in the mustard family, growing to approximately 30 centimeters (cm) (12 inches) tall,with white and maroon flowers. This species is found only in the south San Joaquin valley and adjacent coastal ranges. California jewelflower has a blooming period between March and May.

4.1.5 San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

San Joaquin adobe sunburst is listed as Threatened on the Federal level and as Endangered on the State level. This species is an annual herb growing up to 28 inches (70 centimeters) tall. It has an early blooming period, between February and April annually, and is primarily found on the southeastern side of the San Joaquin Valley, at elevations between 330 and 3000 feet AMSL, growing in grasslands and open oak woodland habitats, sometimes on adobe clay.

5. Findings

The records search of the California Natural Diversity Database (CNDDB) indicated the nearest known occurrences of burrowing owl were approximately 16 miles northwest, and approximately 14 miles southwest of the Project site. However, during the Habitat Assessment a western burrowing owl (Athene cunicularia) was observed roosting on the Project site by a small mammal burrow located at (**36.220776, -119.307144; Photo 11, Den 1**). Another active den site was located approximately 133 feet at 285° west from the first den location; den 2 located at (**36.220862, -119.307582; Photo 12, Den 2**). Both active den sites had whitewash around the opening. Ground squirrels were observed using other dens on the property. The western burrowing owl is federally protected by the Migratory Bird Treaty Act (MTBA) and considered to be a Bird of Conservation Concern (BCC). This species is state listed has S3: Vulnerable – at moderate risk of extirpation in the state due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. Circadian activity is all year round, hunting day or night, they frequently perch or stand at burrow entrances in the daytime.

According to CNDDB records, known occurrences of San Joaquin kitfox were approximately 1.3 miles northwest and 2.46 miles southwest from the Project site in 1975 and 1992. Although suitable habitat for this species is present within the vicinity of the project site, there were no indications of kitfox presence on the Project site, burrows lacked the distinctive keyhole shape associated with this species. The proposed Project is unlikely to adversely affect populations of this species.

The closest known occurrence of Swainson's hawk in the vicinity of the Project site was 4.00 miles southwest in 1994. There are no suitable nesting trees for raptor species in sight of the project area. The closest powerlines are along Prosperity Avenue, located as close as 0.33 miles north from the Project site. No raptor activity was observed within 0.5 miles of the Project area, although a dead juvenile redtailed hawk was found on the Project site, likely preyed on by the burrowing owl (**Photo 13**). There is suitable foraging habitat for Swainson's hawk or other raptor species, however due to lack of suitable nesting trees it is unlikely any raptor species other than burrowing owl would be nesting in the area.

The Habitat Assessment was conducted outside the blooming period for the special status plant species listed in this report. Regardless, no special-status plant species were observed on the Project site. Due to a high level of disturbance, urbanization, and past agricultural practices, habitat conditions do not appear to be conducive for the listed plant species in this report.

With implementation of the recommended mitigation measures (below), the proposed development of this property is unlikely to adversely affect western burrowing owl or other special-status species listed in this report. The findings for this report are summarized below.

6. Recommendations:

Potential burrowing owl conservation measures may include collapsing all unoccupied burrows of suitable dimensions, identifying protected buffer areas around occupied owl burrows, or translocation of owls. Avoidance measures may include but not limited to the following:

- Avoid disturbing occupied burrows during the nesting period, from 1 February through 31 August.
- Avoid impacting burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls.
- Avoid direct destruction of active burrows through chaining (dragging a heavy chain over an area to remove shrubs), or disking.
- Develop and implement a worker awareness program to increase the on-site worker's recognition of and commitment to burrowing owl protection.
- Place visible markers near burrows to ensure that farm equipment and other machinery does not collapse burrows.
- Do not fumigate, use treated bait or other means of poisoning nuisance animals in areas where burrowing owls are known or suspected to occur.

6.1 Recommended Mitigation Measures:

Soar Environmental Consulting, Inc. recommends the following mitigation measures prior to the commencement of ground disturbing activities, and during construction activities while burrowing owls remain present on site. 1) Biological preconstruction surveys to determine presence and nesting status of burrowing owls near the Project site. 2) If burrowing owls are present during construction activities, biological monitoring is recommended to avoid causing disturbance or harm to resident burrowing owls.

Surveys will be conducted according to the Staff Report on Burrowing Owl Mitigation (CDFG 2012). The following recommendations are in support of California Environmental Quality Act requirements. Implementation of the following mitigation measures would avoid, minimize and mitigate impacts to a less than significant level.

Mitigation Measure BIO-1: Take Avoidance Survey Burrowing Owls – Preconstruction Survey

A qualified biologist will conduct a take avoidance survey for burrowing owls within 14 days prior to the start of construction. The survey area will include all suitable habitats on and within 200 meters of project impact areas, where accessible. Implementation of avoidance and minimization measures (Bio MM 2) would be triggered by positive owl presence on the site where project activities will occur.

Mitigation Measure BIO-2: Disturbance-Free Buffer around Active Nest Burrows – Bio Monitoring

If owl presence is detected on the site where project activities will occur during preconstruction surveys (MM BIO-1), one of the following must be implemented:

- **Option A: Disturbance-Free Buffer around Active Nest Burrows** – Bio Monitoring (Avoidance of Active Nests and Roosts)

  If project activities are undertaken during the breeding season (February 1 - August 31) and active nest burrows are identified within or near project impact areas, a 200-meter disturbance-free buffer will be established around these nest burrows. If construction activities take place within the established 200 meter buffer, a biological monitor will be present to avoid, minimize, and mitigate potential negative impacts, and a 50 meter disturbance-free buffer will be implemented.

  During the nonbreeding season (September 1 - January 31), resident owls occupying burrows in or near project impact areas will be avoided by establishing a 50-meter disturbance-free buffer. Smaller buffer areas during the nonbreeding season may be implemented with the presence of a qualified biological monitor during all activities occurring within 50 meters of occupied burrows. Buffers will remain in place for the duration of project activities occurring within the vicinity of burrowing owl activity.

- **Option B: Passive Relocation of Resident Owls**

  During the nonbreeding season (September 1-January 31), resident owls occupying burrows in project impact areas may be passively relocated to alternative habitats. This activity would be conducted per a relocation plan prepared by a qualified biologist. Passive relocation may include one or more of the following elements: 1) establishing a minimum 50-foot buffer around all active burrowing owl burrows, 2) removing all suitable burrows outside the 50-foot buffer and up to 50 meters outside of the impact areas as necessary, 3) installing one- way doors on all potential owl burrows within the 50-foot buffer, 4) leaving one-way doors in place for 48 hours to ensure owls have vacated the burrows, and 5) removing the doors and excavating the remaining burrows within the 50-foot buffer.

7. Study Limitations

This Report has been prepared in accordance with generally accepted environmental methodologies and contains all the limitations inherent in these methodologies. The Report documents site conditions that were observed during field reconnaissance and do not apply to future conditions. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this Report.

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APPENDIX A: Project Site Photographs

Photo 1 – Drone Aerial Imagery of Project Site (01/17/2021)

Photo 2 – North Boundary (View East)

Photo 3 – East Boundary of Project Site (View North)

Photo 4 – South Boundary of Project Site (View East)

Photo 5 – West Boundary of Project Site (View North)

Photo 6 – Center of Project Area (View North)

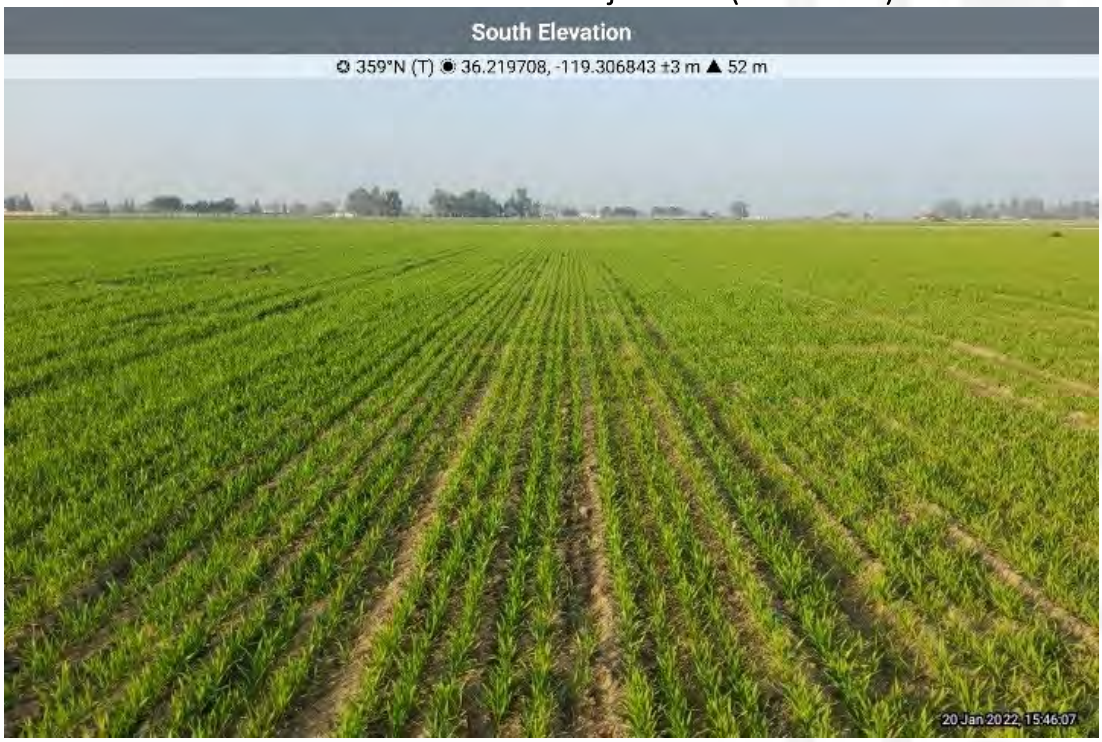

Photo 7 – Center of Project Area (View East)

Photo 8 – Center of Project Area (View South)

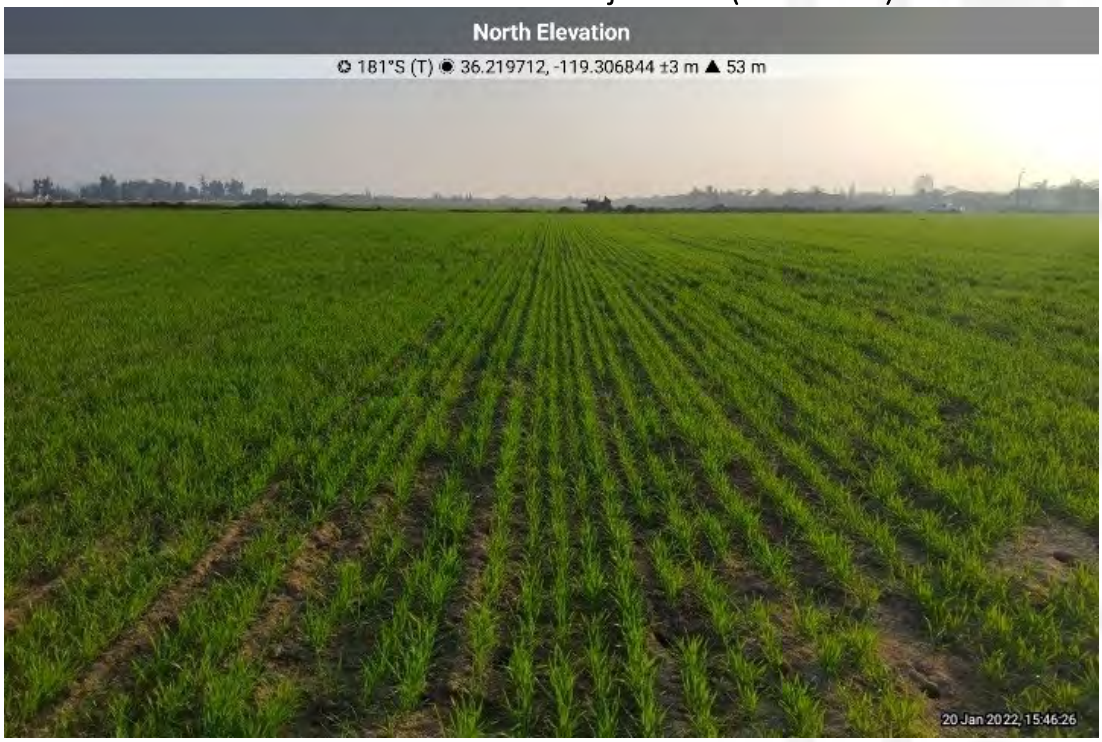

Photo 9 – Center of Project Area (View West)

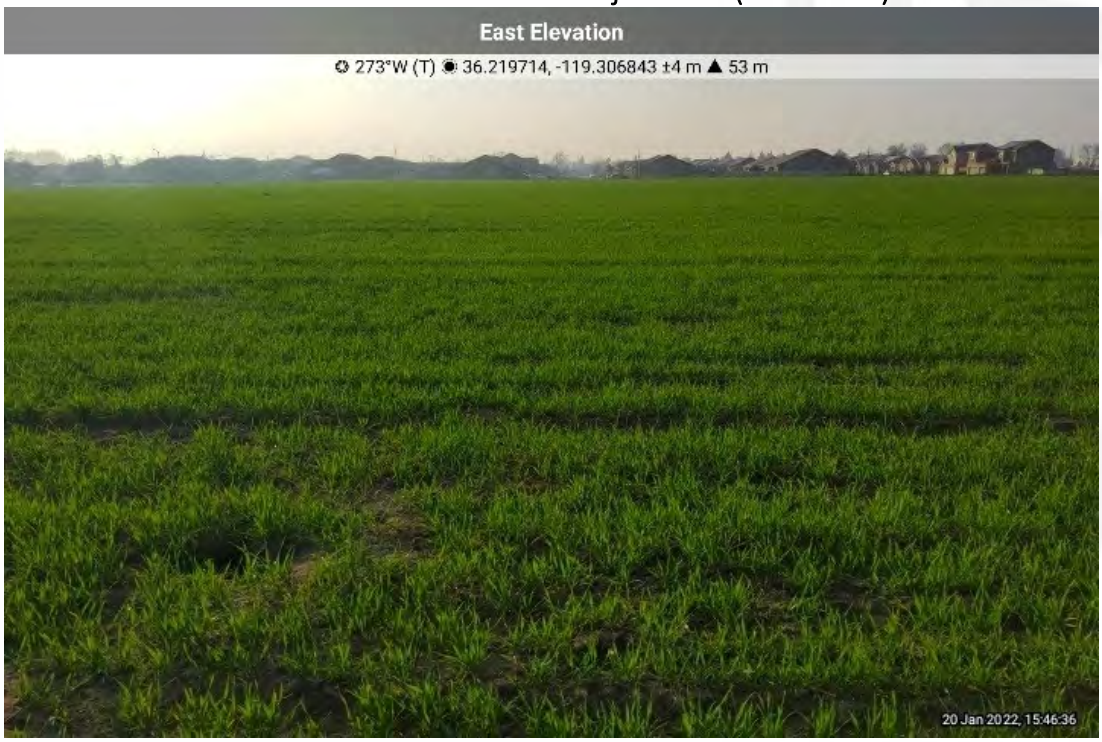

Photo 10 – Stormwater Retention Pond (View North)

Photo 12 – Active Burrowing Owl Den 2

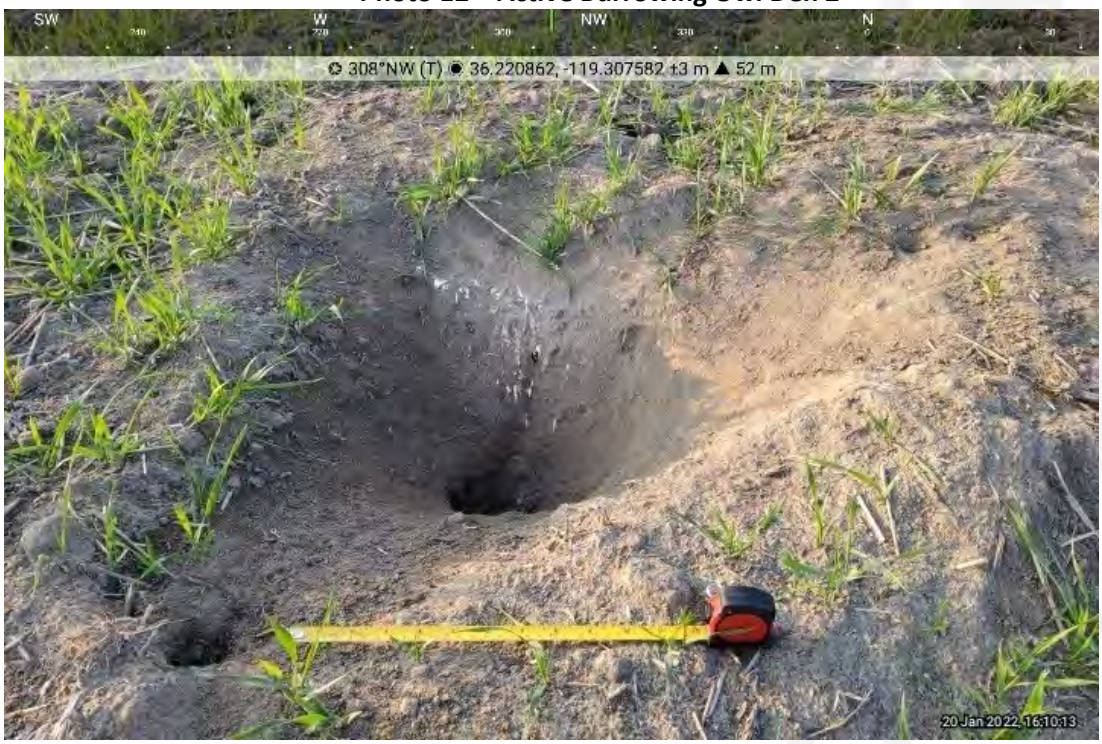

Photo 13 – Possible Prey Remains (juvenile hawk)

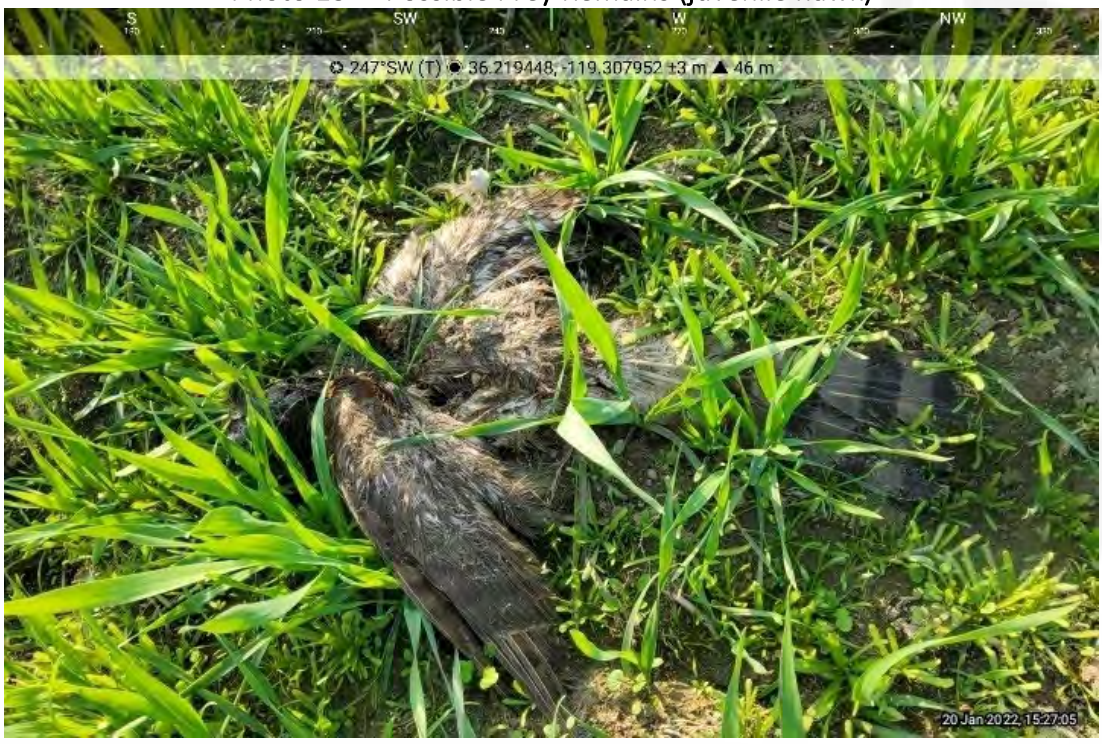

Photo 14 Burrowing Owl Observed on Project Site (View West)

Appendix C

Cultural Records Search Results

Cultural Resources Assessment for the KCOK Phase 9 Tentative Subdivision Project, City of Tulare, Tulare County, California

Consuelo Y. Sauls

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February 2022

USGS Tulare 7.5' topographic quadrangle;
20.69 total project acres; 20.69 acres surveyed
Keywords: Negative, Santa Rosa Rancheria Tachi Yokut Tribe

EXECUTIVE SUMMARY

Taylored Archaeology completed a Phase I cultural resource assessment for the KCOK Phase 9 Tentative Subdivision Map Project (Project) in the City of Tulare, Tulare County, California. The Project proposes to construct 88 single-family residences on a 20.69-acre lot located 0.33 miles south of the intersection of Prosperity Avenue and Morrison Street in the City of Tulare, California. The Project requires environmental analysis by the City of Tulare as lead agency in compliance with the California Environmental Quality Act (CEQA). As part of the CEQA environmental analysis, Taylored Archaeology prepared the following Phase I cultural resource assessment.

This Phase I cultural resource assessment includes background research, review of archaeological records from the Southern San Joaquin Valley Information Center (SSJVIC), a search of the Sacred Lands File from the Native American Heritage Commission (NAHC), local Native American outreach, archival research, a pedestrian survey of the Project area, and documentation of cultural resources identified within the Project boundary.

SSJVIC records indicated two prior cultural resource investigations within the Project area, and two prior cultural resource investigations within a 0.5-mile radius. However, further investigation of the prior cultural studies determined that no surveys have previously been conducted within the Project boundary. The records did not identify cultural resources within the Project area, and two historic-era resources were recorded within a 0.5-mile radius of the Project area: Burlington Northern Santa Fe Railway (P-54-004632) and the Old 99 Ditch of the Tulare Irrigation District (P-10-007227).

The NAHC Sacred Lands File (SLF) search was negative and recommended contacting local Native American tribal representatives. The SLF and outreach to the tribal representatives did not result in the identification of sacred places within the Project area. However, it should be noted that Santa Rosa Rancheria requested to be retained for a Cultural Presentation for all construction staff.

A Phase I archaeological pedestrian survey of the 20.69-acre Project site was conducted by archaeologist Consuelo Sauls on January 9, 2022. The terrain throughout the Project has been disturbed by more than a century of agricultural use. No archaeological resources were identified within the Project area. The potential for buried cultural deposits in the Project area is moderate. Therefore, Taylored Archaeology makes the following recommendations:

In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the Project area, 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 area, 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.

If human remains are uncovered during construction, the Tulare 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 PRC 5097.98 require that the coroner notify the Native American Heritage Commission (NAHC) within 24 hours of discovery. The NAHC will be responsible for designating the Most Likely Descendent who will make recommendations regarding the treatment and disposition of the remains.

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APPENDICIES

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1
INTRODUCTION

1.1 PROJECT DESCRIPTION AND LOCATION

The proposed Project includes the construction of a single-family residential development of approximately 88 lots on the 20.69–acre Project site located one-third of a mile south of the intersection of Prosperity Avenue and Morrison Street within the City of Tulare, Tulare County, California (Figure 1-1). 4creeks, Inc., as the prime contractor to the private developer for environmental compliance services, retained Taylored Archaeology to conduct a Phase I cultural resources assessment of the KCOK Phase 9 Tentative Subdivision Map Project (Project) for compliance with the California Environmental Quality Act (CEQA).

The proposed Project site is comprised of Assessor Parcel 172-010-047 and is within Section 6 of Township 20 South, Range 25 East, Mount Diablo Meridian of the Tulare, California 7.5-minute USGS topographic quadrangle (Figure 1-2). The Project area is surrounded by agricultural uses to the north, east and south and a residential area to the west.

The proposed Project includes subdivision of the current property into 88 parcels, construction of 88 single-family residences, and associated neighborhood streets, landscaping, sidewalks, and utilities within the Project site. Wet utilities will be installed at a max depth of 13 feet below ground surface (bgs) and excavating approximately 2 feet below ground surface.

1.2 REGULATORY SETTING

Cultural resources within the context of this report are defined as a historical or prehistorical archaeological site, or a historical structure, object, or building. Consistent with 36 CFR 60.3, the term “historical” in this report applies to archaeological remains and artifacts, and additionally to buildings, objects, or structures that are at least 50 years old. While exceptions to the 50-year criterion occur, they are relatively rare. The significance or importance of a cultural resource is dependent upon whether the resource qualifies for inclusion at the local or state in the California Register of Historical Places (CRHR). Cultural resources that are determined to be eligible for inclusion in the CRHR are called “historical resources” (CCR 15064.5[a]). Under this statue the determination of eligibility is partially based on the consideration of the criteria of significance as defined in 14 CCR 15064.5(a)(3).

1.2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to CEQA, a historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources may include, but are not limited to, “any object, building, structure, site, area, place, record, or manuscript which

a lead agency determines to be historically or archaeologically significant" (PRC §5020.1[j]). In addition, a resource included in a local register of historical resources or identified as significant in a local survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1.

According to CEQA guidelines §15064.5 (a)(3), criteria for listing on the California Register of Historical Resources includes the following:

> (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
> (B) Is associated with the lives of persons important in our past.
> (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
> (D) Has yielded, or may be likely to yield, information important in prehistory or history.

According to CEQA guidelines §21074 (a)(1)(2), criteria for tribal cultural resources includes the following:

> (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: (A) included or determined to be eligible for inclusion in the California Register of Historical Resources. (B) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

1.3 PROFESSIONAL QUALIFICATIONS

Archaeologist Consuelo Y. Sauls (M.A.), a Registered Professional Archaeologist (RPA 41591505) managed the assessment and compiled this report for the Project. Ms. Sauls also conducted the records search and performed the pedestrian field survey of the Project site. Ms. Sauls meets the Secretary of the Interior's Standards for Professional Qualifications in Archaeology. Statement of Qualifications for key personnel is provided in Appendix A.

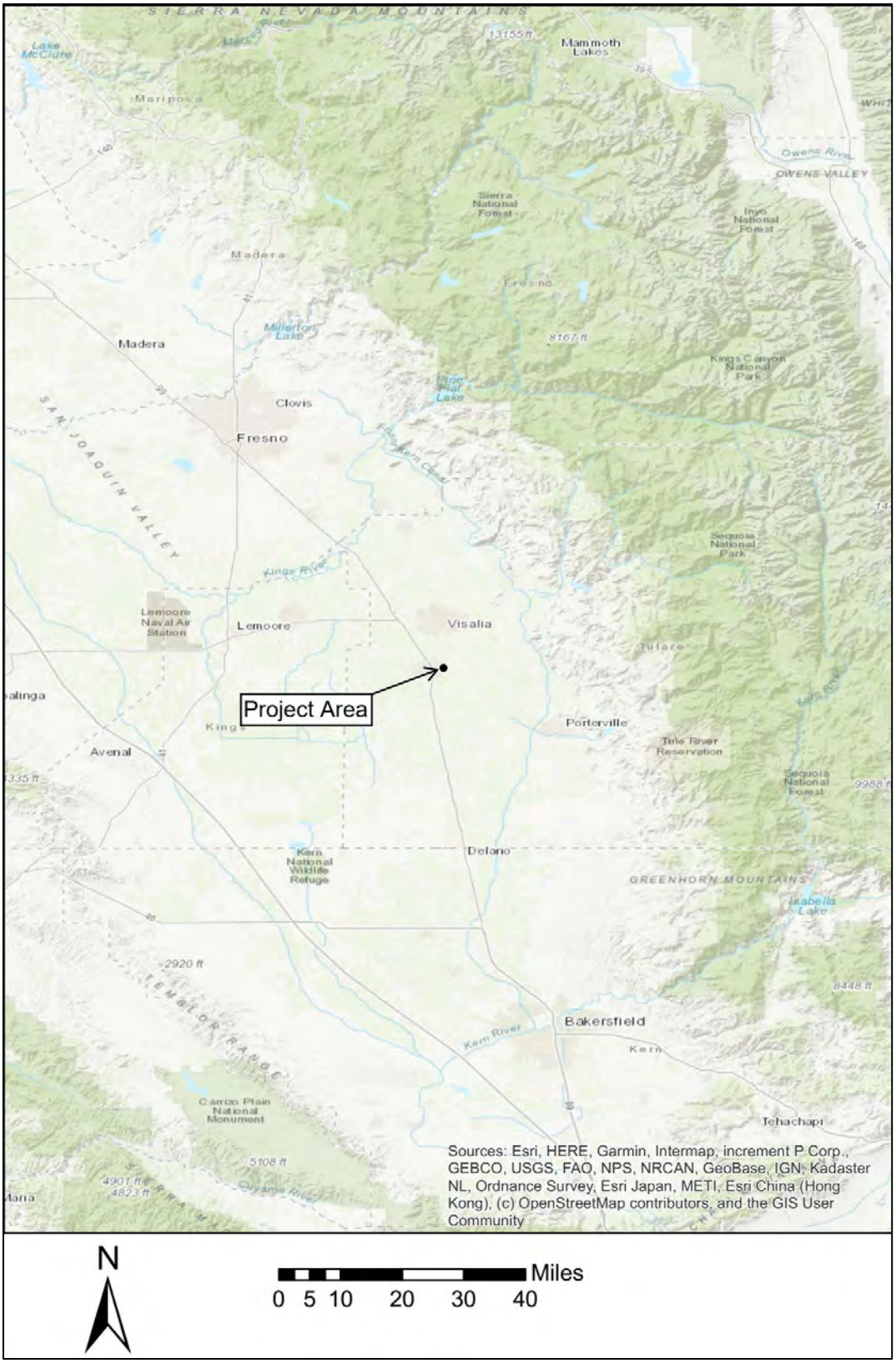

Figure 1-1 Project vicinity in Tulare County, California.

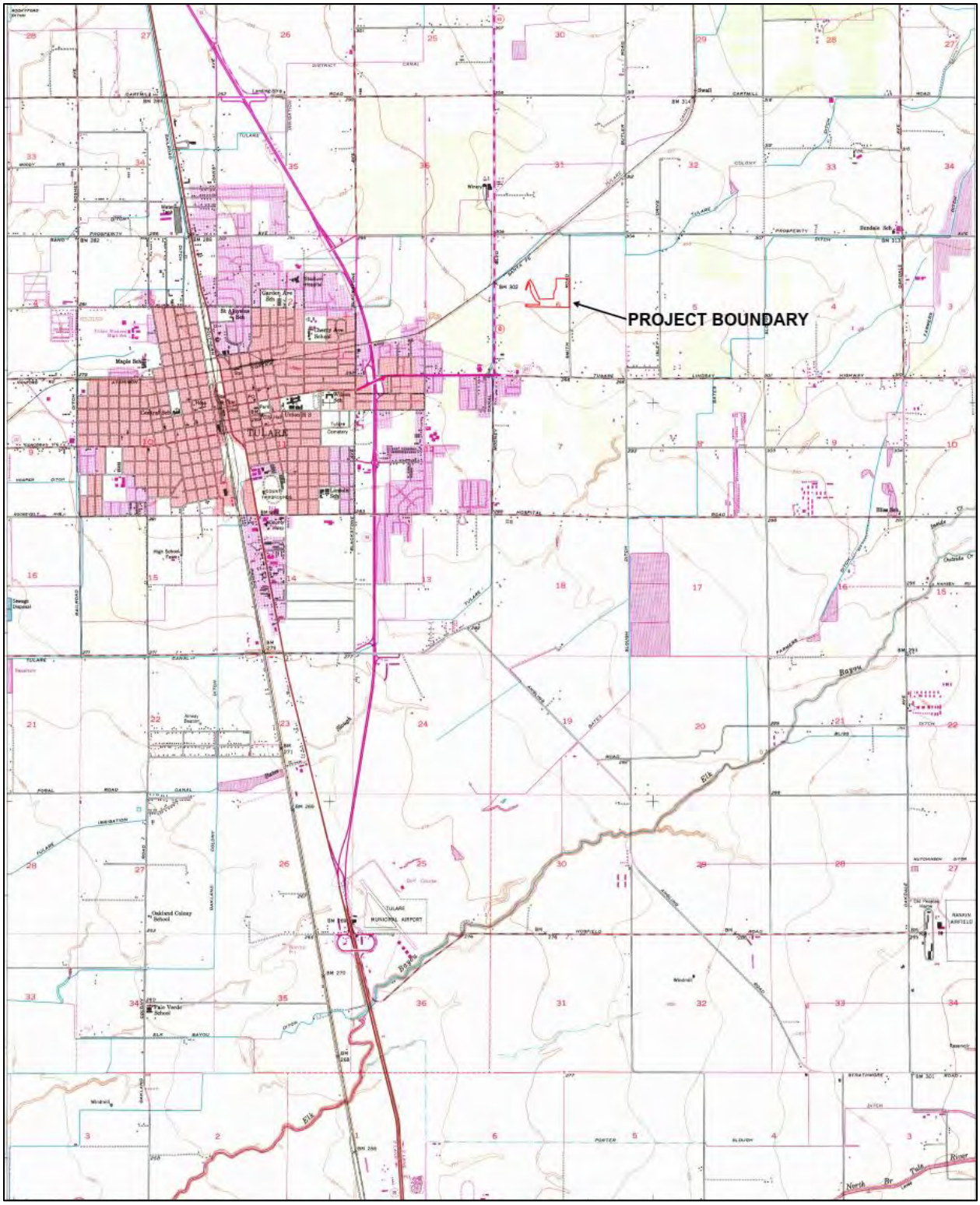

Figure 1-2 Project location on the USGS Tulare, CA 7.5-minute quadrangle.

Figure 1-3 Aerial view of the Project boundary showing survey coverage.

1.4 REPORT ORGANIZATION

This report documents the results of a cultural resource assessment of the proposed Project area. In order to comply with California regulations for CEQA, the following specific tasks were completed: (1) requesting a records search from the Southern San Joaquin Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), at California State University, Bakersfield; (2) requesting a Sacred Lands File Search and list of interested parties from the Native American Heritage Commission (NAHC) and initiating outreach to local Native American individuals and tribal representatives; (3) conducting an archaeological pedestrian survey, (4) preparing this technical report.

This report follows the California Office of Historic Preservation standards in the 1990 Archaeological Resources Management Report Recommended Contents and Format. Chapter 1 describes the Project and its location, and identifies the key personnel involved in this report. Chapter 2 explains the Project setting, including the natural, prehistoric, historic, and ethnohistoric background for the Project area and surrounding area. Chapters 3 describes the methods of the archival studies, Native American outreach, and pedestrian survey and chapter 4 is the results from using the methods. Chapter 5 summarizes the Project findings and offers recommendations. Chapter 6 is a bibliography of references cited within this report. The report also contains the following appendices: Qualifications of key personnel (Appendix A), the CHRIS records search results (Appendix B), and Taylored Archaeology's nongovernmental Native American outreach (Appendix C).

2
PROJECT SETTING

2.1 NATURAL ENVIRONMENT

The Project site lies in the Central Valley of California, which is approximately 450 miles from north to south, and ranges in width east to west from 40 to sixty miles (Prothero 2017). The Central Valley is divided into two subunits, the Sacramento Valley in the north and the San Joaquin Valley in the south, which are each named after the primary rivers within each valley (Madden 2020). The Project is located approximately 294 feet above sea level on the open flat plains of the Southern San Joaquin Valley. Climate within the San Joaquin valley is classified as a 'hot Mediterranean climate', with hot and dry summers, and cool damp winters characterized by periods of dense fog known as 'tule fog' (Prothero 2017).

The San Joaquin Valley is a comprised of a structural trough created approximately 65 million years ago and is filled with nearly 6 miles of sediment (Bull 1964). The San Joaquin Valley ranges from Stockton and the San Joaquin-Sacramento River Delta in the north to Wheeler Ridge to the south, ranging nearly sixty miles wide at its widest (Zack 2017). It is split by late Pleistocene alluvial fans between the San Joaquin River hydrologic area in the north and the Tulare Lake Drainage Basin in the south (Rosenthal et al 2007). The Project site is located within the latter of the two hydrologic units. The Kaweah, Tule, Kern, and Kings rivers flowed into large inland lakes with no outflow except in high flood events, in which the lakes would flow from through the Fresno Slough into the San Joaquin River. The largest of these inland lakes was the Tulare Lake, which occupied a vast area of Tulare and Kings Counties and was the largest freshwater lake west of the Mississippi. These four tributary rivers accounted for more than 95 percent of water discharged into Tulare Lake, with the remaining five percent sourced from small drainages originating in the Coast Ranges to the west (Adams et al. 2015).

The Project is in central western Tulare County on the valley floor of the San Joaquin Valley within the greater Kaweah River Delta alluvial fan. Specifically, the Project is located approximately one mile northwest of the former Bates' Slough and approximately three miles northwest of the extant Elk Bayou, both of which are distributaries of the Kaweah River (Thompson 1892). Distributaries form when debris-laden river waters meet abrupt changes in channel and slope confinement, resulting in unstable channel networks that change with time (Wagner et al. 2013). Before the appearance of agriculture in the nineteenth century, the Project location would have been comprised of prairie grasslands with scatter oak tree savannas near the foothills, and along the various streams and drainages (Preston 1981). Riparian environments would also have been present along various waterways, including drainages and marshes. Native vegetation likely would have consisted of needle grasses and other perennial bunchgrasses before the introduction of non-native species in the 1800s.

The valley floor of the region was largely dominated by marshlands, lakes, and annual grasslands. Historically, these habitats provided a lush environment for large animals, including various migratory birds and other waterfowl, grizzly bear (*Ursus arctos californicus*), tule elk (*Cervus* sp.),

pronghorn (*Antilocapra americana*), mule deer (*Odocoileus hemionus*), black bear (*Ursus americanus*), and mountain lion (*Puma concolor*) (Preston 1981). Native trees and plants observed in the Project vicinity include various blue, live, and white oaks (*Quercus* sp.), cottonwood (*Populus aegiros*), and willow (*Salix* sp.). The introduction of agriculture to region resulted in large animals being forced out of their habitat. Common land mammals now include valley coyote (*Canis latrans*), bobcat (*Lynx rufus*), gray fox, kit fox (*Vulpes macrotis*), and rabbits (Leporidae). Rivers and lakes throughout the valley provide habitat for freshwater fish, including rainbow trout (*Oncorhynchus mykiss*), Sacramento sucker (*Catostomidae* sp.), and Sacramento perch (*Archoplites interruptus*), (Preston 1981).

2.2 PREHISTORIC SETTING

Archaeologists develop models of prehistoric resource chronologies and description of lifestyles based on data collected at archaeological sites they investigate to better understand the past. Models of prehistoric life patterns are developed from both archaeological and ethnographic research. Archaeological studies in the San Joaquin Valley began in the early 1900s with several archaeological investigations (Rosenthal et al. 2007). The Southern San Joaquin Valley is of one of the least understood areas within California due to a lack of well-grounded chronologies for large segments of the valley (Rosenthal et al. 2007). This is largely due to the valley floor being filled with thick alluvial deposits, and from human activity largely disturbing much of the valley floor due to a century and a half of agricultural use (Dillon 2002; Siefken 1999). Mound sites may have occurred as frequently as one every two or three miles along major waterways but studying such mounded occupations sites is difficult as most surface sites have been destroyed (Schenck and Dawson 1929). Much of the early to middle Holocene archaeological sites may be buried as deep as 10 meters due to millennia of erosion and alluvial deposits from the western Sierras (Moratto 1984).

Mass agricultural development has heavily disturbed and changed the landscape of the Southern San Joaquin Valley, from the draining of marshes and the vanishing of the extensive Tulare Lake, to grading nearly the entire valley for agricultural operations (Garone 2011). These activities have impacted or scattered much of the shallow surface deposits and mounds throughout the valley (Rosenthal et al 2007). Some researchers have suggested that potentially as much as 90 percent of all Central California archaeological sites have been destroyed from these activities (Riddell 2002). A previous prehistoric archaeological sensitivity model for the San Joaquin Valley was conducted by Far Western Anthropological Research Group in 2010, which analyzed sensitivity based on various geographic factors such as water proximity, slope, soil type, and landform (Meyer et al. 2010). According to this model, the Project site is located within an area of moderate for the potential presence of buried prehistoric archaeological deposits.

The cultural traits and chronologies which are summarized below are largely based upon information discussed in multiple sources, including Bennyhoff and Fredrickson (1973, 1974), Garfinkel (2015), McGuire and Garfinkel (1980), Moratto (1984), and Rosenthal et al. (2007). The most recent comprehensive approach to compiling a chronology of the Southern San Joaquin Valley prehistory is by Garfinkel in 2015, which builds off Rosenthal's 2007 previous work. Both Garfinkel's and Rosenthal's chronologies are calculated in years B.C. In the interest of maintaining

cohesiveness with modern anthropological research, the dates of these chronologies have been adapted into years before present (B.P.).

The Paleo-Indian Period (13,500-10,600 cal B.P.) was largely represented by ephemeral lake sites which were characterized by atlatl and spear projectile points. Around 14,000 years ago, California was largely a cooler and wetter place, but with the retreat of continental Pleistocene glaciers, California largely experienced a warming and drying period. Lakes filled with glacial meltwater were located in the valley floor and used by populations of now extinct large game animals. A few prehistoric sites were discovered near the southwestern shore of Tulare Lake (Garfinkel 2015). Foragers appear to have operated in small groups which migrated on a regular basis.

During the Lower Archaic Period (10,500-7450 cal B.P.), climate change created a largely different environment which led to the creation of larger alluvial fans and flood plains. Most of the archaeological records of the prior period wound up being buried by geological processes. During this time, cultural patterns appear to have emerged between the foothill and valley populations of the local people. The foothill sites were often categorized by dense flaked and ground stone assemblages, while the valley sites were instead characterized by a predominance of crescents and stemmed projectile points. Occupation within the area is represented mostly by isolated discoveries, and along the former shoreline of Tulare Lake finds are typically characterized by chipped stone crescents, stemmed points, and other distinctive flakes stone artifacts (Rosenthal et al. 2007). Variations in consumption patterns emerged as well, with the valley sites more marked by consumption of waterfowl, mussels, and freshwater fish, while the foothills sites saw an increase in nuts, seeds, and a more narrowly focused diet than the valley sites.

The Middle Archaic (7450-2500 cal B.P.) saw an increase in semi-permanent villages along river and creek settings, with more permanent sites located along lakes with a more stable supply of water and wildlife. Due to the warmer and drier weather of this period, many lakes within the valley dramatically reduced in size, while some vanished completely (Garone 2011). Cultural patterns during this time saw an increase in stone tools, while a growth in shell beads, ornaments, and obsidian evidence an extensive and ever-growing long-distance trade network. Little is known of cultural patterns in the valley during the Upper Archaic (2500-850 B.P.), but large village structures appeared to be more common around local rivers. An overall reduction of projectile point size suggests changing bow and arrow technologies. Finally, the Emergent Period (850 cal B.P. - Historic Era) was generally marked by an ever-increasing specialization in tools, and the bow and arrow generally replaced the dominance of the dart and atlatl. Cultural traditions ancestral to those recorded during ethnographic research in the early 1900s are identifiable.

2.3 ETHNOGRAPHY

The Project area is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts. The Yokuts are a sub-group of the Penutian language that covers much of coastal and central California and Oregon (Callaghan 1958). The

Yokuts language contained multiple dialects spoken throughout the region, though many of them were mutually understandable (Merriam 1904).

The Yokuts have been extensively researched and recorded by ethnographers, including Powers (1877), Kroeber (1925), Gifford and Schenck (1926, 1929), Gayton (1930, 1945), Driver (1937), Harrington (1957), Latta (1977), and Wallace (1978). Much of the research from these ethnographers focuses on the central Yokuts tribes due to the northernmost tribes being impacted by Euro-Americans during the California Gold Rush of the mid 1800s, and by the southernmost tribes often being removed and relocated by the Spanish to various Bay Area or coastal missions. The central Yokuts tribes, and especially the western Sierra Nevada foothill tribes, were the most intact at the time of ethnographic study.

The most detailed ethnographic information gathered regarding Native American group territories in Central California is located within maps prepared by Kroeber. The information presented in Kroeber's map of Southern and Central Yokuts shows the Project area within the Choinok Yokuts territory (1925: Plate 47). The main village for this area was *Ch'iuta*, which was approximately 7 miles southeast of the City of Tulare somewhere between the Elk Slough and the Tule River (Kroeber 1925). Primary Yokuts villages were typically located along lakeshores and major stream courses, with scattered secondary or temporary camps and settlements located near gathering areas in the foothills. Yokuts were organized into groups originally designated as tribelets by Kroeber, with one or more linked villages and smaller settlements within a territory (Kroeber 1925).

Designation of these units as 'tribelets' is often viewed as pejorative by many Native Americans, and for the remainder of this report will be referred to as 'local tribes' instead. Each local tribe was a land-owning group that was organized around a central village, and shared common territory and ancestry. Most local tribe populations ranged from 150 to 500 people (Kroeber 1925). These local tribes were often led by a chief, who was often advised by a variety of assistants including the winatum, who served as a messenger and assistant chief (Gayton 1930). Early studies by Kroeber (1925), Gifford and Schenck (1926), and Gayton (1930) concluded that social and political authority within local tribes was derived from male lineage and patriarchy. However, more recent reexaminations (Dick-Bissonnette 1998) argue that this assumption of patriarchal organization was based on male bias by early 20th century researchers, and instead Yokuts sociopolitical authority was matriarchal in nature and centered around matrilineal use-rights and women's work groups.

Due to the abundance of natural resources within the greater Tulare Lake area, the Yokuts maintained some of the largest populations in North America west of the continental divide (Cook 1955a). Six Native American tribal groups are currently associated with the Project area, including the Tubatulabals of Kern Valley, Wukasache Indian Tribe/Eshom Valley Band, the Kern Valley Indian Community, the Santa Rosa Rancheria Tachi Yokut Tribe, and the Tule River Indian Tribe.

2.4 HISTORIC SETTING

2.4.1 California History

European contact in modern-day California first occurred in 1542 with the arrival of a Spanish expedition lead by Juan Rodríguez Cabrillo into San Diego Bay (Engstrand 1997). Expeditions along the California coast continued throughout the sixteenth century and primarily focused on finding favorable harbors for further expansion and trade across the Pacific. However, rocky shorelines, unfavorable currents, and wind conditions made traveling north from New Spain to the upper California coast a difficult and time-consuming journey (Eifler 2017). The topography of California, with high mountains, large deserts, and few natural harbors lead to European expansion into California only starting in the 1760s. As British and Russian expansion through fur trading encroached on California from the north, Spain established a system of presidios, pueblos, and missions along the California coast to defend its claim, starting with Mission San Diego de Alcalá in 1769 (Engstrand 1997).

2.4.2 Central California History

The San Joaquin Valley did not experience contact with Europeans until the late 1700s (Starr 2007). Life at the California missions was hard and brutal for Native Americans, with many dying of disease, poor conditions, and many fleeing to areas not under direct Spanish control (Jackson and Castillo 1995). The earliest exploration of the San Joaquin Valley by Europeans was likely by the Spaniards when in the fall of 1772 a group known as the Catalonian Volunteers entered into the valley through Tejon Pass in search of deserters from the Southern California Missions (Zack 2017). However, the group only made it as far north as Buena Vista Lake in modern day Kern County before turning around due to the extensive swamps. Additional excursions to the valley were for exploration such as those led by Lieutenant Bariel Moraga in 1806, but also to find sites for suitable mission sites and to track down Native Americans fleeing the coastal missions (Cook 1958).

Subsequent expeditions were also sent to pursue outlaws from the coast who would often flee to the valley for safety. One of the subsequent explorations was an expedition in 1814 to 1815 with Sargent Juan Ortega and Father Juan Cabot, who left the Mission San Miguel with a company of approximately 30 Spanish soldiers and explored the San Joaquin Valley (Smith 2004). This expedition passed through the Kaweah Delta and modern-day Visalia and made a recommendation to establish a mission near modern-day Visalia. However, with European contact also came European disease. Malaria and other new diseases were brought by Europeans, and in 1833 an epidemic of unknown origin traveled throughout the Central Valley. Some estimates place the Native American mortality of the epidemic as high as 75 percent (Cook 1955b). Combined with the rapid expansion of Americans into California in 1848 during the Gold Rush, Native American populations within the valley never fully recovered (Eifler 2017).

Initial settlement within the valley by Europeans in the 1830s was largely either by trappers like Jedediah Smith or horse thieves like Pegleg Smith (Clough and Secrest 1984). In fact, horse and other livestock theft was so rampant that ranching operations on the Rancho Laguna de Tache

by the Kings River and Rancho del San Joaquin Rancho along the San Joaquin River could not be properly established (Cook 1962). With the end of the Mexican American War and the beginning of the gold rush in 1848, the San Joaquin Valley became more populated with ranchers and prospectors. Most prospectors traveled by sea to San Francisco and used rivers ranging from the Sacramento River to the San Joaquin River to access the California interior (Eifler 2017). Most areas south of the San Joaquin River were less settled simply because those rivers did not connect to the San Francisco Bay area except in wet flood years. By 1850, California became a state and Tulare County was established in 1853.

2.4.3 Local History

The City of Visalia is one of the oldest cities within the Southern San Joaquin Valley and was founded in 1852. By the late 1850s the town of Visalia was a major station along the Butterfield Overland Mail stage route as it traveled north from Los Angeles to Stockton (Helmich 2008). During the first few decades, Visalia was a supply center for nearby gold rushes, served as the regional population center of Tulare County, and had an agricultural economy based on livestock (Dyett and Bhatia 2014).

While the City of Visalia benefitted from being located close to the water sources of the Kaweah River and its delta, settlement around the City of Tulare was a much slower process due to no major rivers or water sources being located nearby. The Southern Pacific Railroad was extended from Fresno into Tulare County in the early 1870s but bypassed the City of Visalia as it was located six miles to the east of the rail line (Small 1926). The City of Tulare was founded in 1872 as the San Joaquin Valley headquarters of the Southern Pacific Railroad. The town was originally intended to be the new county seat, with initial plat maps showing blocks for county buildings and a new county courthouse (Mitchell 1974). The City of Tulare originally prospered but suffered major setbacks in over the next two decades due to three major fires in 1875, 1883, and 1886; by 1888, the town was finally incorporated (Small 1926).

The construction of the rail line also brought an increased in agriculture and farms that clashed with existing ranching operations in the local area. Escalating conflicts and livestock disputes between ranchers and farmers lead to the “No Fence Law” in 1874, which forced ranchers to pay for crop and property damage caused by their cattle (Ludeke 1980). With the passage of this law and the expansion of irrigation systems, predominant land use in the 1870s switched from grazing to farming (Mitchell 1974). This led to the beginning of the vast change of the San Joaquin Valley from native vegetation and grasslands to irrigated crops (Varner and Stuart 1975).

Because water rights within California originally arose from the first come first serve policy of the Gold Rush era, diverting surface water to farms became big business, but a convoluted mess of customs, traditions, and conflicting claims (Zack 2017). To solve this mess, the Wright Act of 1887 was passed that allowed residents to petition a local county board of supervisors to create irrigation districts that had the power to issues bonds, and tax land within the district boundaries to pay for the creation and maintenance of canals and ditches for irrigation purposes.

One such district was the Tulare Irrigation District, which was organized on September 21, 1889. The Tulare Irrigation District originally covered 219,000 acres from the foothills of the Sierra Nevada to the eastern boundary of Tulare Lake but was ultimately reduced to approximately 32,000 acres. At the same time, an important step forward was made in ditch-digging technology that allowed irrigation systems to be built at a faster pace. From the 1840s to 1890s, farm ditches and canals were largely constructed through the use of buckboards and slip-scoops, which involved the use of a board pulled by horses in an uprights position in order to level ground (Bulls 2010). Between 1883 and 1885, Scottish immigrant James Porteous had moved to Fresno and made significant improvements to the buckboard style scraper that allowed the new scraper to be pulled by two horses and scrape and move soil while dumping it at a controlled depth. This new design was patented and sold as the "Fresno Scraper", which lead to an explosion of ditch digging efforts within the San Joaquin Valley (Zack 2017).

3
METHODS

3.1 RECORDS SEARCH

On December 16, 2021, Taylored Archaeology requested a records search for the Project area and within a 0.5-mile radius of the Project boundary from the SSJVIC of the CHRIS at California State University in Bakersfield, California. The records search included a review of all recorded archaeological and historical resources in the Project area and within a 0.5-mile radius of the Project. Sources consulted included archaeological site and survey base maps, historical United States Geological Survey (USGS) topographic maps, reports of previous investigations, cultural resource records (DPR forms) 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 (Appendix B).

3.2 ARCHIVAL RESEARCH

Taylored Archeology conducted archival research which includes literature review and background research of historical maps, historical aerial photographs, historical USGS topographic maps, Google Earth aerial photographs, Google Street View photos, books, articles and other records regarding the prehistory and history of the Project area. The results of this research are presented in Chapter 4.

3.3 NATIVE AMERICAN OUTREACH

On December 16, 2021, Taylored Archaeology sent a request to the NAHC for a Sacred Lands File (SLF) search, to determine if any known Native American cultural properties (e.g., places of religious, sacred activity, or traditional use or gathering areas) are present within the Project area. The NAHC also included contact information for local Native American tribal representatives who may have knowledge or interest in sharing information of resources of sacred or spiritual significance in the Project area and surrounding area. Each Native American tribal representative listed was sent a letter and map notifying them of the Project and asking if they had any knowledge of the Project area or surrounding vicinity. Follow-up communications was performed via email and phone calls, as appropriate.

3.4 PEDESTRIAN SURVEY

On January 9, 2022, archaeologist Consuelo Sauls performed an intensive Phase I pedestrian survey of the 20.69-acre Project site to identify the presence of archaeological and historical resources on the ground surface. The whole area in the Project boundary was accessible and surveyed and the survey was completed by walking parallel transects spaced 15 meters apart. Plan maps and visible landmarks were used for navigation to locate and survey the Project area. Ms. Sauls photographed the survey area using an iPhone 11 Pro digital camera and recorded location data using the Gaia GPS application.

4
FINDINGS

4.1 RECORDS SEARCH RESULTS

The SSJVIC provided the results of the records search in a letter dated January 4, 2022 (Records Search File No. 21-485; Appendix B). The letter indicated that two prior cultural resource investigation reports (TU-00041 and TU-01190) were within the Project area (Table 4-1). Further review of these two reports revealed TU-01190 is a book regarding historical accounts of early European interactions with Native Americans in the local area, and TU-00041 is a US Bureau of Land Management Class I cultural resources literature review for the Concord to Colton Pipeline. No pedestrian surveys were conducted for either report.

Table 4-1
Previous Cultural Resource Investigation Reports within the Project Area

Report Number	Author(s)	Date	Report Title	Study
TU-00041	Self, William	1995	Class I Overview Santa Fe Pacific Pipeline Partners, L.P. Proposed Concord to Colton Pipeline Project	Literature Review; No survey of Project area
TU-01190	Mitchell, Annie R.	1957	Jim Savage and the Tulareño Indians	Book; No survey of Project area

Two prior cultural resource investigation reports (TU-00458 and TU-01085) were conducted within a 0.5-mile radius of the Project area (Table 4-2).

Table 4-2
Previous Cultural Resource Investigation Reports 0.5-mile radius of the Project Area

Report Number	Author(s)	Date	Report Title	Study
TU-00458	Schiffman, Robert A.	1987	Archaeological Investigation for Ranch Acres No. 2, Tulare County, California	Phase I Pedestrian Survey
TU-01085	Dodd, Douglas W.	1999	Historical Architectural Survey Report/Historic Resource Evaluation Report for Roadbed Rehabilitation and Intersection Upgrades on State Route 63 Between Tulare and Visalia, Tulare County	Architectural/Historical Evaluation

The SSJVIC records search also stated that no cultural resources are recorded within the Project area, but two cultural resources (P-54-004632 and P-54-005296) are recorded within a 0.5-mile radius of the Project area (Table 4-3). P-54-004632 is the Burlington Northern Santa Fe Railway (BNSF), located 0.14 miles northwest of the Project boundary. P-54-005296 is the Old 99 Ditch of the Tulare Irrigation District which is also located 0.14 miles northwest of the Project boundary.

Table 4-3
Previous Recorded Cultural Resources within 0.5-miles radius of the Project Area

Resource Number	Age Association	Resource Type	Distance From Project Site
P-54-004632	Historic	Structure; Railroad	0.15 Miles
P-54-005296	Historic	Structure; Canal	0.15 Miles

No prior archaeological and historical pedestrian surveys were reported to be conducted on the Project site. Also no prehistoric or historic resources were recorded on the Project site.

4.2 ARCHIVAL RESEARCH RESULTS

Detailed historical map coverage of the Project site began in 1892, when a survey of Tulare County showed the Project area as owned by a James Twaddel in the eastern portion and split between a F.L. Hunt and a D.G. Hamilton in the west (Thompson 1892). The portion owned by Hamilton is shown as cultivated orchards. No structures are mapped within the Project area. The Kaweah Canal, now known as the Tulare Ditch, is shown approximately 0.15 miles to the northwest of the Project area.

Based on a review of historic USGS topographic maps from 1925 to 1979, and historic aerial imagery from 1959 to present day, no historic structures or buildings appear on the Project site. Historic use of the Project site appears to have been for orchards in the late 1800s, and for low-lying row crops from the 1950s to present day.

4.3 NATIVE AMERICAN OUTREACH RESULTS

The NAHC stated in a January 26, 2022, letter that the SLF search results were negative. The NAHC sent a list of local Native American organizations and individuals culturally affiliated with the Project area (see Appendix C). All potentially interested individuals identified by the NAHC were contacted for information regarding their knowledge of cultural resources that were within the study locale. The letters were sent via certified mail on January 18, 2022, to six Native American tribal representatives and included a description of the proposed Project, a map of the location and requested any additional information they may have about Native American cultural resources that may be affected by the proposed Project. Follow-up email correspondence and phone calls were made to confirm receipt of the letter and gather any information or input tribal representatives may want to share about the Project area or general vicinity.

Native American organizations/individuals contacted from the list provided by NAHC below:

- Chairperson Elizabeth D. Kipp of Big Sandy Rancheria of Western Mono Indians;
- Chairperson Leo Sisco of the Santa Rosa Rancheria Tachi Yokut Tribe;
- Chairperson Neil Peyron of the Tule River Indian Tribe;
- Environmental Department Director Kerri Vera of the Tule River Indian Tribe;
- Tribal Archaeologist Joey Garfield of the Tule River Indian Tribe; and
- Chairperson Kenneth Woodrow of the Wuksache Indian Tribe/Eshom Valley Band.

One email reply to Taylored Archaeology was received on February 2, 2022. Cultural Specialist II Samantha McCarty of the Santa Rosa Rancheria Tachi-Yokut Tribe (Tribe) stated that the Tribe is requesting to be retained for a Cultural Presentation for all construction staff. Environmental Department Director Kerri Vera stated in a February 2, 2022 phone call that she would review the project information and respond by email. No other responses were received to date.

4.4 PEDESTRIAN SURVEY RESULTS

Taylored Archaeology conducted an intensive pedestrian survey of the 20.69-acre Project site (Figure 4-1). The results of the pedestrian field survey indicated that there were no cultural resources (prehistoric or historic features) discovered or recorded during the field survey of the proposed Project site. The ground surface throughout the Project area has been disturbed by modern agricultural practices. The landscape in the Project site consisted primarily of corn fields (Figure 4-2). The ground visibility at the time of survey was fair (50 to 70 percent) due to vegetation of corn fields and short grasses. Ground visibility on dirt paths and roads in the Project boundary was good (100 percent). Surface sediments were observed to be grayish-brown sandy loam texture with abundant silt with many angular shaped pebbles and gravel. Rodent burrows and related soil piles were closely examined for soil type and lithic scatters. The northwestern part of the Project boundary was mostly graded or paved over and was adjacent to a residential neighborhood (Figure 4-3). No subsurface testing was carried out within the Project boundary.

Figure 4-1 Central portion of project site, facing southwest. Newley sprouted corn field in foreground.

Figure 4-2 Ground visibility on project site.

Figure 4-3 Northwestern corner of project site, facing west.

5
SUMMARY AND RECOMMENDATIONS

The Phase I cultural resource assessment for the KCOK Phase 9 TSM Project was negative for the presence of cultural resources. The purpose of this assessment is to identify potential cultural resources on the ground surface within the 20.69-acre Project boundary in the City of Tulare, Tulare County, California. The Project proponent proposes to construct a single-family residential development that comprised of approximately 88 residential units with streets, sidewalks, landscaping.

Archival research results showed no evidence of historical structures or historical buildings on the Project site.

The SSJVIC records search resulted identified two prior cultural resource investigations within the Project area and two prior cultural resource investigations within a 0.5-mile radius. Further review of the prior studies showed that no pedestrian surveys were conducted within the Project boundary. The records search also indicated that it did not identify any cultural resources within the Project area; however, there were two historic-era resources recorded within a 0.5-mile radius around the surrounding area, the Burlington Northern Santa Fe Railway (BNSF) (P-54-004632) and the Old 99 Ditch of the Tulare Irrigation District (P-10-007227). The two historic-era resources are approximately 0.15 miles away from the Project site; therefore, the proposed Project does not appear to have the potential to impact the two resources.

A search of the NAHC's Sacred Lands File and outreach to local Native American representatives did not result in the identification of sacred places within the Project area.

It should be noted that the Santa Rosa Rancheria Tachi Yokut Tribe requested to be retained for a Cultural Presentation for all construction staff.

The intensive pedestrian survey of the Project site did not identify any prehistoric or historic resources on the ground surface. The potential for buried cultural deposits in the Project area is moderate. Taylored Archaeology makes the following recommendations:

In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the Project area, 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 area, 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.

If human remains are uncovered during construction, the Tulare 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 PRC 5097.98 require that the coroner notify the Native American Heritage Commission (NAHC) within 24 hours of discovery. The NAHC will be responsible for designating the Most Likely Descendent who will make recommendations regarding the treatment and disposition of the remains.

6
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APPENDIX A

Personnel Qualifications

Consuelo Sauls, M.A., RPA 41591505
Archaeologist
csaulsarchaeo@gmail.com
559.797.1572

Areas of Expertise

- Prehistoric archaeology
- Rock art recordation and analysis
- Laboratory management

Years of Experience

- 12

Education

- M.A., Archaeology, University of Durham, 2014
- B.A., Anthropology, California State University, Fresno, 2009

Registrations/Certifications

- Registered Professional Archaeologist 41591505

Professional Affiliations

- California Rock Art Foundation
- Coalition for Diversity in California Archaeology
- Society for American Archaeology
- Society for California Archaeology
- Society of Black Archaeologists

Professional Experience

2019 – 2022	Principal Investigator, Taylored Archaeology, Fresno, California
2018 – 2019	Staff Archaeologist, Applied EarthWorks, Inc., Fresno, California
2016 – 2018	Principal Investigator, Soar Environmental Consulting, Inc., Fresno, California
2015	Archivist/Database Technician, Development and Conservation Management, Inc., Laguna Beach, California
2013	Laboratory Research Assistant, Durham University Archaeology Department and Archaeology Museum, Durham, England, UK
2011 – 2012	Laboratory Technician (volunteer), University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, Pennsylvania
2008 – 2009	Laboratory Technician (intern), California State University, Fresno
2008	Field School, California State University, Fresno

Technical Qualifications

Ms. Sauls meets the Secretary of the Interior's Professional Qualification Standards as an archaeologist. She has conducted pedestrian surveys, supervised Extended Phase I survey, authored technical reports, and completed the Section 106 process with the State Historic Preservation Officer and Tribal Historic Preservation Officer. Her experience includes data recovery excavation at Western Mono sites and processing recovered artifacts in the laboratory as well as conducting archival research about prehistory and ethnography of Central California. Ms. Sauls has authored and contributed to technical and letter reports in compliance with of the National Historical Preservation Act (NHPA) Section 106 and the California Environmental Quality Act (CEQA). She also has supported NHPA tribal consultation and responded to Assembly Bill 52 tribal comments. Ms. Sauls also has an extensive background supervising laboratory processing, cataloging, and conservation of prehistoric and historical archaeological collections. In addition, she worked with the Rock Art Heritage Group in the management, preservation, and presentation of rock art in museums throughout England, including a thorough analysis of the British Museum's rock art collections. At Durham University Archaeology Museum, Ms. Sauls processed the excavated skeletal remains of 30 individuals from the seventeenth century

APPENDIX B

Records Search Results

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

1/4/2022

Consuelo Sauls
Taylored Archaeology
6083 N. Figarden Dr. Ste. 616
Fresno, CA 93722

Re: KCOK Phase 9 TSM
Records Search File No.: 21-485

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Tulare USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.5 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ GIS data

Resources within project area:	None
Resources within 0.5 mile radius:	P-54-004632, 005296
Reports within project area:	TU-00041, 01190
Reports within 0.5 mile radius:	TU-00458, 01085

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation 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. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Jeremy E David
Assistant Coordinator

APPENDIX C

Native American Outreach

NATIVE AMERICAN HERITAGE COMMISSION

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

January 26, 2022

Consuelo Sauls
Taylored Archaeology

Via Email to: csaulsarchaeo@gmail.com

Re: KCOK Phase 9 TSM Project, Tulare County

Dear Mr. Suals:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Tulare County
1/26/2022

Big Sandy Rancheria of Western Mono Indians
Elizabeth Kipp, Chairperson
P.O. Box 337 — Western Mono
Auberry, CA, 93602
Phone: (559) 374 - 0066
Fax: (559) 374-0055
lkipp@bsrnation.com

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8 — Southern Valley
Lemoore, CA, 93245 — Yokut
Phone: (559) 924 - 1278
Fax: (559) 924-3583

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov

Tule River Indian Tribe
Kerri Vera, Environmental Department
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct. — Foothill Yokut
Salinas, CA, 93906 — Mono
Phone: (831) 443 - 9702
kwood8934@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed KCOK Phase 9 TSM Project, Tulare County.

Native American Outreach Log

KCOK Phase 9 Tentative Subdivision Map Project, Tulare County, California

Organization	Name	Position	Address	Phone Number	Email Address	Letter	E-Mail	Phone	Summary of Contact
Native American Heritage Commission							12/16/2021		NAHC responded and sent a letter dated January 26, 2022, and a list of 6 Native American representatives contacts.
Big Sandy Rancheria of Western Mono Indians	Elizabeth Kipp	Chairperson	P.O. Box 337 Auberry, CA 93602	559-374-0066	lkipp@bsrnation.com	1/18/2022	1/27/2022	2/2/2022	No response. Left voice message on the phone.
Santa Rosa Rancheria Tachi Yokut Tribe	Leo Sisco	Chairperson	P.O. Box 8 Lemoore, CA 93245	559-924-1278	no email address	1/18/2022		2/2/2022	Samantha McCarty is the main point of contact.
Santa Rosa Rancheria Tachi Yokut Tribe	Samantha McCarty	Cultural Specialist	P.O. Box 8 Lemoore, CA 93245	559-924-1278 559-633-6640	smccarty@tachi-yokut-nsn.gov	1/18/2022	1/27/2022	2/2/2022	Ms. McCarty responded in email and requests the Tribe to be retained for a Cultural Presentation for construction staff.
Tule River Indian Tribe	Neil Peyron	Chairperson	P.O. Box 589 Porterville, CA 93258	559-781-4271	neil.peyron@tulrivertribe-nsn.gov	1/18/2022	1/27/2022	2/2/2022	Kerri Vera is the main point of contact.
Tule River Indian Tribe	Kerri Vera	Environmental Department	P.O. Box 589 Porterville, CA 93258	559-783-8892	kerri.vera@tulerivertribe-nsn.gov	1/18/2022	1/27/2022	2/2/2022	Spoke on the phone and will get back to me about project.
Tule River Indian Tribe	Joey Garfield	Tribal Archaeologist	P.O. Box 589 Porterville, CA 93258	559-783-8932	joey.garfield@tulerivertribe-nsn.gov	1/18/2022	1/27/2022	2/2/2022	Kerri Vera is the main point of contact.
Wuksache Indian Tribe/Eshom Valley Band	Kenneth Woodrow	Chairperson	1179 Rock Haven Ct. Salinas, CA 93906	831-443-9702	kwood8934@aol.com	1/18/2022	1/27/2022	2/2/2022	No response. Left voice message on the phone.

Gmail **Consuelo Sauls <csaulsarchaeo@gmail.com>**

Tentative Subdivision Map No. 2021-21 - KCOK 5 & 9, General Plan Amendment No. 2021-02, Zone Amendment No. 747, and CUP No. 2021-22

2 messages

Samantha McCarty <SMcCarty@tachi-yokut-nsn.gov> Wed, Feb 2, 2022 at 4:31 PM
To: Steven Sopp <ssopp@tulare.ca.gov>, Consuelo Sauls <csaulsarchaeo@gmail.com>
Cc: Shana Powers <SPowers@tachi-yokut-nsn.gov>, Maria Gonzales <mgonzales@tachi-yokut-nsn.gov>, Paige Berggren <pberggren@tachi-yokut-nsn.gov>, Damion Cuara <DCuara@tachi-yokut-nsn.gov>, "William K. Barrios" <wbarrios@tachi-yokut-nsn.gov>

Dear Steven and Consuelo,

Thank you for contacting the Santa Rosa Rancheria Tachi-Yokut Tribe regarding: Tentative Subdivision Map No. 2021-21 - KCOK 5 & 9, General Plan Amendment No. 2021-02, Zone Amendment No. 747, and CUP No. 2021-22. The Tribe is requesting to be retained for a Cultural Presentation for all construction staff. If you have any questions, comments, and or concerns please contact the Santa Rosa Rancheria Cultural Department. Thank you.

Sincerely,

Samantha McCarty

Santa Rosa Rancheria Tachi-Yokut Tribe

Cultural Specialist II

SMcCarty@tachi-yokut-nsn.gov

Office: (559) 924-1278 x 4091

Cell: (559) 633-6640

***PLEASE KEEP ALL CULTURAL STAFF IN EMAILS UNLESS STATED OTHERWISE**

---

csaulsarchaeo@gmail.com <csaulsarchaeo@gmail.com> Wed, Feb 2, 2022 at 4:40 PM
To: Samantha McCarty <SMcCarty@tachi-yokut-nsn.gov>, Steven Sopp <ssopp@tulare.ca.gov>
Cc: Shana Powers <SPowers@tachi-yokut-nsn.gov>, Maria Gonzales <mgonzales@tachi-yokut-nsn.gov>, Paige Berggren <pberggren@tachi-yokut-nsn.gov>, Damion Cuara <DCuara@tachi-yokut-nsn.gov>, "William K. Barrios" <wbarrios@tachi-yokut-nsn.gov>

Hi Samantha,

Thank you for your response. I will include your request as part of my cultural report and will also pass your request on to the project manager.

Appendix D

VMT Assessment

Draft Vehicle Miles Traveled Analysis

KCOK
(Single-Family Housing)

Located on the Northwest Corner of
Morrison Street and Seminole Avenue

In the City of Tulare, California

Prepared for:
4Creeks
324 S Santa Fe, Suite A
Visalia, CA 93292

March 11, 2022

Project No. 037-010

Traffic Engineering, Transportation Planning, & Parking Solutions
516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Phone: (559) 570-8991
www.JLBtraffic.com

Traffic Engineering, Transportation Planning, & Parking Solutions

Draft Vehicle Miles Traveled Analysis

For KCOK located on the Northwest Corner of Morrison Street and Seminole Avenue

In the City of Tulare, CA

March 11, 2022

This Vehicle Miles Traveled Analysis has been prepared under the direction of a licensed Traffic Engineer. The licensed Traffic Engineer attests to the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data from which recommendations, conclusions and decisions are based.

Prepared by:

_____

Jose Luis Benavides, P.E., T.E.

President

Traffic Engineering, Transportation Planning, & Parking Solutions
516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Phone: (559) 570-8991
www.JLBtraffic.com

Table of Contents

List of Appendices

Project Description

This Report describes a **Draft Vehicle Miles Traveled (VMT) Analysis** prepared by **JLB Traffic Engineering, Inc. (JLB)** for the proposed **KCOK (Project)** located in the City of Tulare. Specifically, the Project proposes to develop approximately 25.87 gross acres on the northwest corner of Morrison Street and Seminole Avenue with 88 single-family detached housing units. Based on information provided to JLB, the Project will undergo a General Plan Amendment through the City of Tulare to modify the land use designation to Low Density Residential.

VMT Analysis

Regulatory Setting and Criteria of Significance

Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as VMT instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities are no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 26, 2020, the City of Tulare prepared a memo titled *Proposed Process and Thresholds for Assessing Vehicle Miles Traveled for Development Projects Starting July 1, 2020* which summarized VMT and provided a recommendation for the City to "use map-based screening for residential and office/industrial projects with travel forecasting data from Tulare County Association of Governments (TCAG), and apply the recommendations for VMT thresholds." The City of Tulare recommended VMT Guidelines were prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7.

The City of Tulare VMT Guidelines adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis. These criteria may be size, location, proximity to transit or trip making potential. In general, development projects that meet one or more of the following criteria can be screened out from a quantitative VMT analysis.

1. Projects that generate fewer than 110 trips per day
2. Projects within a ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor
3. Affordable housing projects in infill locations
4. Locally serving retail
5. Transit projects, bike projects, pedestrian enhancements, livability enhancements, and street safety improvement projects.
6. Map-based screening – Residential and office projects can be considered to result in less than significant impacts on VMT if they are located within low VMT areas on a map or maps generated for cities or regions using VMT data modeling.

This screening tool is consistent with the OPR December 2018 Guidance referenced above. Figure 1 in Appendix A shows the existing average VMT by traffic analysis zones (TAZs) in TCAG's regional model. The County average trip distance in miles traveled is 11.48 miles. The screening tool includes a map of the City of Tulare with several different colored areas. "Areas shown in green are areas with average trip distance in miles below 9.76 miles, representing the 15% reduction from the regional average of 11.48 miles. TAZs shown in yellow/maize represent areas in the City below the regional average, but not meeting the 15% reduction target from the regional average. TAZs shown in red represent areas in the City where the average trip distance is higher than the regional average. This map can be used as a screening threshold for residential and office/industrial to show areas that are already achieving the thresholds indicated in Table 1 [shown in Appendix A]. Generally, if a project is located in the areas shown in green, it is likely meeting the thresholds in Table 1, unless there are specific project characteristics that would result in an overall increase in VMT, rather than redistribution of vehicle trips. Ultimately, the thresholds in Table 1 should be used to guide the type of analysis required, depending on the project type."

For projects that are not screened out, a quantitative analysis of VMT impacts must be prepared and compared against the recommended VMT thresholds of significance. The City of Tulare recommended VMT Guidelines memo includes thresholds of significance for development projects, transportation projects and land use plans. These thresholds of significance were developed using the County of Tulare as the applicable region, and the required reduction of VMT (as recommended in the City of Tulare VMT Guidelines memo) corresponds to Tulare County's contribution to the statewide GHG emission reduction target. In order to reach the statewide GHG reduction target of 15%, Tulare County must reduce its GHG emissions by 15%. The method of reducing GHG by 15% is to reduce VMT by 15% as well.

VMT Results and Mitigations

As the Project type is General Residential it can utilize Table 1 of the City's VMT screening criteria to determine if the project can be assumed to have less than significant VMT impacts and as a result be screened out from a quantitative VMT analysis. Per Table 1 of the City's VMT screening criteria, General Residential projects which are located within a green area of Figure 1 (prepared by the Tulare County Association of Governments (TCAG)) are presumed to have less than significant impacts to VMT and therefore can be screened out of a quantitative VMT analysis. As shown in Figure 1, the proposed Project is located within the green area with an average distance of 9.48 miles.

As a result, the Project can be screened out of a quantitative VMT Analysis based on the map-based screening criteria. A copy of Figure 1 of the City of Tulare VMT Guidelines is found in Appendix A

Conclusions and Recommendations

Conclusions and recommendations presented below regarding the Project located on the northwest corner of Morrison Street and Seminole Avenue in the City of Tulare are based on the project data and City of Tulare VMT recommended guidelines.

- The County average trip distance in miles traveled is 11.48 miles. Under CEQA, projects should demonstrate a 15% reduction in VMT, thus VMT should be below 9.76 miles. Figure 1 shows VMT per TAZ. Areas shown in green are areas with average trip distance in miles below 9.76 miles.
- The proposed Project is General Residential.
- The project is located in a green area with the TAZ average VMT of 9.48 miles.
- General Residential projects that fall within the green area can be screened out of a VMT Analysis as they are presumed to have less than significant impacts to VMT.
- Thus, the proposed Project can be screened out of a quantitative VMT Analysis based on the map-based screening criteria.

Study Participants

JLB Traffic Engineering, Inc. Personnel

Jose Luis Benavides, PE, TE	Project Manager
Carlos Ayala Magaña, EIT	Engineer I/II
Matthew Arndt, EIT	Engineer I/II
Jesus Garcia	Engineer I/II
Adrian Benavides	Engineering Aide
Christian Sanchez	Engineering Aide

Persons Consulted:

Molly Baumeister	4 Creeks, Inc.
Steven J Macias	4 Creeks, Inc.
Michael Miller, PE	City of Tulare
Mario Anaya	City of Tulare

References

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City of Tulare. 2020. " Proposed Process and Thresholds for Assessing Vehicle Miles Traveled for Development Projects Starting July 1, 2020". Tulare: City of Tulare.

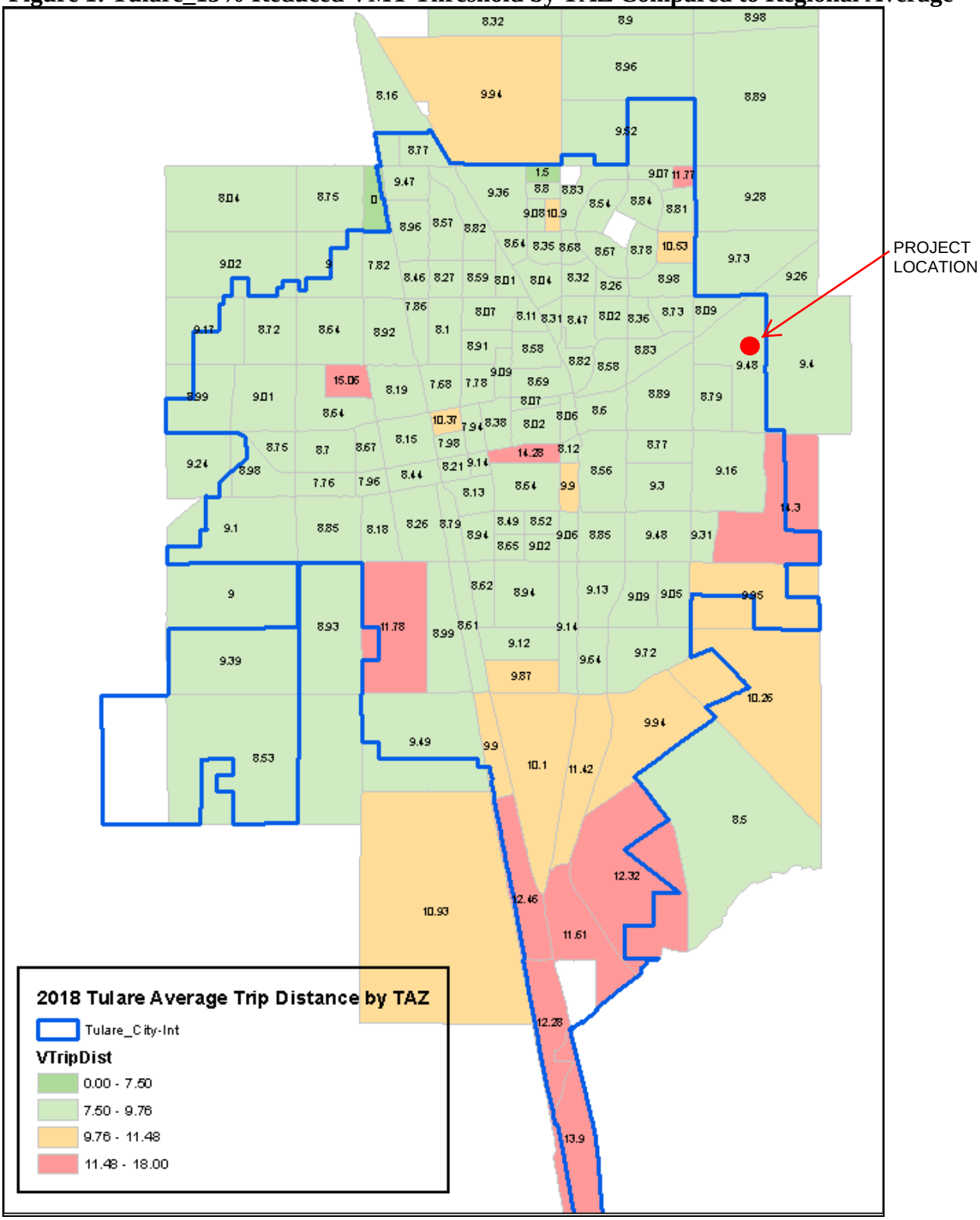
Governor's Office of Planning and Research. 2018. Technical Advisory On Evaluating Transportation Impacts In CEQA. Ebook. Sacramento: State of California, pp.1-34. Available at: <https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf> [Accessed 20 January 2021].

Appendix A: City of Tulare VMT Thresholds and 2018 Average Trip Distance

Table 1: Thresholds by Project Type for the City of Tulare

Project Type	Recommended Thresholds
Projects that generate < 110 trips per day	Screened Out of Detailed VMT Analysis
Projects within a ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor	Screened Out of Detailed VMT Analysis
Affordable Housing Projects in Infill Locations	Screened Out of Detailed VMT Analysis
Transit projects, bike projects, pedestrian enhancements, livability enhancements, and street safety improvement projects.	Screened Out of Detailed VMT Analysis
Schools, Parks, and Other Public Facility or Public Safety Facility	Screened Out, unless it results in net increase in VMT
Locally Serving Retail	Screened Out, unless it results in net increase in VMT
Regional Commercial or Retail Attracting Trips from Throughout the Region	Any net increase in total VMT
General Residential	15% below existing regional average trip length per TAZ
Office/Industrial Projects	15% below existing regional average trip length per TAZ
Mixed-Use Projects	Apply Corresponding Threshold to Each Type of Use, Unless One Use Dominates, Then Consider the Dominant Use Threshold
Redevelopment Projects	Any net increase in total VMT Over Existing

Figure 1: Tulare_15% Reduced VMT Threshold by TAZ Compared to Regional Average



Source: Tulare County Association of Governments, 2020.