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Section 1

Initial Study/Negative Declaration Process

City of Tulare
 411 East Kern Avenue
 Tulare, CA 93274

SECTION 1

CEQA Review Process

Project Title: Cartmill Commercial

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 a commercial development project on approximately 21 acres in the City of Tulare. The Project would also subdivide the 21-acre site into 10 parcels. 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: Cartmill Commercial

2.1 Project Background & Purpose

The proposed project involves the development of a commercial development project on approximately 21 acres in the City of Tulare. The proposed uses include a hotel, gas station, sit-down restaurant, and drive-thru restaurant. The Project may also include other uses that are permitted or conditionally permitted within the C-3 Retail Commercial Zone. These uses are listed in Table 2-1, below.

The Project would subdivide the 21-acre site into 10 parcels and would result in on-site and off-site infrastructure improvements, including frontage improvements, new local streets, and new and relocated utilities. Construction is proposed to begin in July 2021 and is anticipated to last approximately 18 months. See Figure 3-2 for site layout.

Commercial establishments engaged in performing a service in a professional Office, including financial, medical and professional activities.	Permitted
Establishments involved in financial transactions including banks, savings and loans, thrifts, etc.	Permitted
Auto parts stores (installation of parts on site)	Permitted
Auto parts sales (including installation of parts on site)	Permitted
Vehicle repair, including, body, glass & upholstery	Conditional
Auto, motorcycle and RV sales, including incidental repair on-site, conducted entirely within an enclosed building.	Conditional
Large truck sales and service	Conditional
Car washes	Conditional
Service stations, an accessory uses including auto repair and convenience stores*	Conditional
Vehicle rental/leasing agencies	Conditional
Tire sales and incidental repair	Permitted
Hotels and motels	Conditional
RV Parks	Conditional
Boarding houses	Conditional
Single room occupancy (SRO's)	Conditional
Delicatessens/sandwich shops/donut shops	Permitted
Night clubs/bars/lounges (serving of alcoholic beverages*)	Conditional
Restaurant without a drive-through	Permitted
Restaurant with a drive-through	Permitted

Auditoriums, convention halls and theaters	Conditional
Miscellaneous indoor (bowling alleys, billiard halls, dance halls, gymnasium, skating rinks, sports arenas, arcades)	Conditional
Miniature golf courses	Conditional
Blood banks, health clinics/outpatient surgery	Conditional
Hospitals, convalescent homes	Conditional
Outpatient treatment programs	Conditional
Residential care facilities	Conditional
Senior/congregate care facilities	Conditional
Social services centers	Permitted
Barber/beauty/nail shops	Permitted
Dance/gymnastics schools/martial arts studios	Permitted
Dry cleaners	Permitted
Health/athletic clubs	Permitted
Self-service laundry establishments	Permitted
Tailors, shoe repair and similar repair shops	Permitted
Licensed/certified massage therapists	Permitted
Gunsmith shops	Permitted
Travel bureau/agencies	Permitted
General merchandise (including variety stores, supermarkets, etc.)	Permitted
Convenience stores	Conditional
Pharmacy/drug stores	Permitted
Flower, gift shops and art galleries	Permitted
Clothing and luggage stores, including apparel repair	Permitted
Home improvements/hardware (including outdoor display of lumber, garden and nursery items)	Permitted
Nurseries/garden supplies	Permitted
Furniture, home appliance/electronics stores	Permitted
Hobby and toy stores, sporting goods, pet stores	Permitted
Jewelry/watch/clock sales and repair	Permitted
Camera stores and photo studios	Permitted
Liquor stores (sale of alcohol*)	Conditional
Medical equipment and supplies	Permitted
Office supplies/equipment/stationery	Permitted
Antiques and second hand stores	Permitted
Pawn shops	Conditional
Food/meat lockers	Permitted
Art supply stores	Permitted
Candy, nut and confectionery stores	Permitted
Clothing and costume rental	Permitted
Floor covering sales	Permitted
Paint and wall paper stores	Permitted
Tobacco stores	Permitted
Bakeries	Permitted
Boat sales	Permitted
Musical instrument sales and repair	Permitted

Miscellaneous repair service shops, including radio/TV repair, appliances and upholsterers	Permitted
Catering establishments	Permitted
Printing/blueprinting/litho and copy shops	Permitted
Gunsmith shops	Permitted
Travel bureau/agencies	Permitted
Locksmiths	Permitted
Laboratories	Permitted
Self-serve recycling machine	Permitted
Taxidermists	Conditional
Auction houses	Permitted
Plumbing supply stores	Permitted
Public/quasi-public uses	
Public or quasi-public uses of an educational or religious type, including schools and colleges, churches, parsonages, parish houses, monasteries, convents and other religious institutions	Conditional
Mortuaries, columbariums and crematoriums	Conditional
Fairgrounds, public parks, playgrounds or other public recreation facilities	Conditional
Public buildings and grounds	Conditional
Small family day care (eight or fewer children)	Permitted
Large family day care (nine or more children)	Conditional
Communications equipment buildings, public utility service yards, gas regulator stations, pumping stations, reservoirs, sumps and sinking basins, electric distribution substations and major transmission line structures.	Conditional
Art and craft schools and colleges	Conditional
Business, professional and trade schools	Conditional
Drainage basins authorized by the Public Works Director	Permitted
City water well sites	Permitted
Miscellaneous use	
Radio and television studios	Permitted
Veterinarians, small animal hospitals and incidental boarding	Permitted
Ambulance service	Conditional
Bus depots/transit facilities	Conditional
On-site accessory storage building	Permitted
Recycling small collection facility	Permitted
Recycling large collection facility	Conditional
Residential uses	Conditional
Fortune telling, hypnotists and palm reading	Conditional
Meeting halls	Conditional
Music studios	Conditional
Private clubs and lodges	Conditional
Electric distribution substations and major transmission lines	Conditional
Roof-mounted solar array	Permitted

Table 2-1. Conditional and Permitted Uses within C-3 Zone. Source: City of Tulare Municipal Code.

2.2 Project Location

The proposed project site is located within the northern portion of the City of Tulare, on the southeast corner of E Cartmill Avenue and SR 99. The project site is approximately 21 gross acres and is located on parcel 166-240-010. The site is bordered by agricultural/vacant land uses to the north, east, and south, and by residential uses and a church to the west.

2.3 Other Permits and Approvals

Other permits and approvals required for the Cartmill Commercial 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 Parcel Map*
- *CUP for hotel and gas station*
- *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 2-2

Section 3

Evaluation of Environmental Impacts

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 3

Evaluation of Environmental Impacts

Project Title: Cartmill Commercial

This document is the Initial Study/Mitigated Negative Declaration for the proposed construction and operation of a commercial development project on approximately 21 acres in the City of Tulare. The Project would also subdivide the 21-acre site into 10 parcels. 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:** Cartmill Commercial
2. **Lead Agency:** City of Tulare
411 East Kern Avenue
Tulare, CA 93274
(559) 684-4210
3. **Applicant:** Cartmill Commons, LLC
Contact Person: Warren Mouw
20799 Road 132
Tulare, CA 93274
(559) 799-3000
4. **Project Location:** The proposed project site is located within the northern portion of the City of Tulare, on the southeast corner of E Cartmill Avenue and SR 99. The project site is approximately 21 gross acres and is located on parcel 166-240-010. The site is bordered by agricultural/vacant land uses to the north, east, and south, and by State Route 99 freeway, residential uses, and a church to the west.
5. **General Plan Designation:** Regional Commercial
6. **Zoning Designation:** Retail Commercial
7. **Project Description:** The proposed project involves the development of a commercial development project on approximately 21 acres in the City of Tulare. The proposed uses include a hotel, gas station, sit-down restaurant, and drive-thru restaurant. The Project may also include other uses that are permitted or conditionally permitted within the C-3 Retail Commercial Zone. See Table 2-1 for full list of possible uses.

The Project would subdivide the 21-acre site into 10 parcels and would result in on-site and off-site infrastructure improvements, including frontage improvements, new local streets, and new and relocated utilities. Construction is proposed to begin in July 2021 and is anticipated to last approximately 18 months. See Figure 3-2 for site layout.
8. **Surrounding Land Use Designations and Settings:**

North	Regional Commercial (City of Tulare 2035 General Plan), currently vacant/agricultural
South	Regional Commercial (City of Tulare 2035 General Plan), currently retention basin/vacant
East	Regional Commercial (City of Tulare 2035 General Plan), currently vacant/agricultural
West	Regional Commercial (City of Tulare 2035 General Plan), currently vacant/SR 99
9. **Required Approvals:** The following discretionary approvals are required from The City of Tulare for the proposed project:
 - City of Tulare Tentative Parcel Map
 - Conditional use permit for hotel and gas station uses

10. **Native American Consultation:** A letter was sent to all tribes with potential knowledge of cultural resources in the Project area on January 28, 2021. Kerri Vera, Director of the Department of Environmental Protection for the Tule River Indian Tribe, replied stating that the tribe had no knowledge of culturally sensitive items or sites within the proposed Project area, and requested to be consulted if items or sites are revealed during research or ground disturbance. Samantha McCarty, a Cultural Specialist from the Santa Rosa Rancheria Tachi Yokut Tribe, responded stating that the Tribe had concerns with the project and requested that the Tribe be retained for a cultural presentation for all construction staff and to be notified of archaeological survey results, archaeological record search results, and any discoveries made related to the project. No other comments were received from any other of the tribes contacted via letter on January 28, 2021, with email and phone call follow-up.
11. **Parking and access:** Vehicular Access to the project site will be available via Gem Street. The proposed development will include internal roads and parking consistent with retail commercial development requirements. During construction, workers will utilize onsite 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 Electrical Services:** City services (water, sewer, stormwater, law enforcement, fire protection etc.) will be extended to the proposed Project area upon development.

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
DWWTP	Domestic Wastewater Treatment Plant
FEIR	Final Environmental Impact Report
FPPA	Farmland Protection Policy Act
ISMND	Initial Study Mitigated Negative Declaration
MCL	Maximum Contaminant Level
MGD	Million Gallons per Day
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



3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported 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 is 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 adequately 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.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Utilities and Service System |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Geology and soils | <input type="checkbox"/> 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

4/12/2021
DATE

Mario Anaya
PRINTED NAME

City of Tulare
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 18 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 located in a relatively flat, undeveloped area.



Photo 1: Eastern site boundary (View north). Source: Soar Environmental Consulting 1/8/2021



Photo 2: Eastern site boundary (View southeast). Source: Soar Environmental Consulting 1/8/2021



Photo 3: Southeast corner (View northeast). Source: Soar Environmental Consulting 1/8/2021



Photo 4: Western site boundary (View northeast). Source: Soar Environmental Consulting 1/8/2021

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 in 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. The foothills of the Sierra Nevada Mountains are approximately 18 miles east of the proposed project site, however views of the mountains 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 6 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 considered to be within an urbanized area. However, 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 commercial development. New lighting sources would include interior lighting from businesses, parking area lighting, street lighting, and security lighting. All street, landscape and parking area 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*.

Mitigation Measures for Aesthetic Resources

None Required

II. AGRICULTURE AND FOREST RESOURCES:

<p>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:</p>	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 designated as Farmland of Local Importance under the Important Farmland Mapping and Monitoring Program (FMMP) but is not currently under agricultural use.

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:

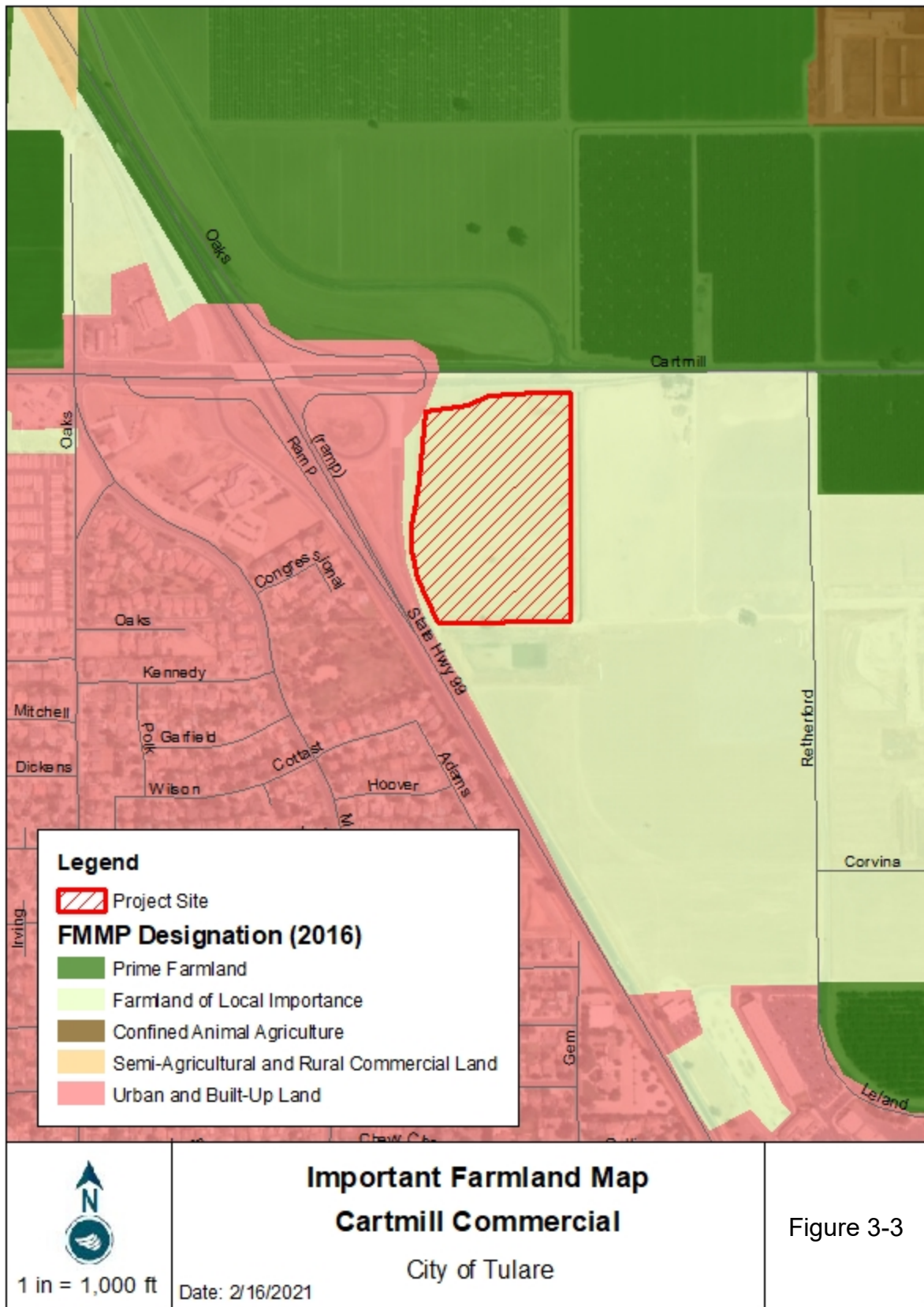
- **Prime Farmland** has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years prior to classification and is capable of producing sustained yields.
- **Farmland of Statewide Importance** has also been used for irrigated production 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.



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?**

No Impact: The proposed site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under the California Department of Conservation FMMP. There is *no impact*.

- 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: The proposed Project would develop a site that is designated as Farmland of Local Importance by the California Department of Conservation FMMP for non-agricultural use. The proposed project is not under active agricultural use and is planned for commercial development in the City's General Plan. Therefore, the impact is *less than significant*.

Mitigation Measures for Agricultural and Forest Resources

None Required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 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 ^D	Nonattainment/Severe
Ozone – Eight hour	Nonattainment/Extreme ^C	Nonattainment
PM 10	Attainment ^A	Nonattainment
PM 2.5	Nonattainment ^B	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. 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.
B. 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).
C. 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).
D. 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 PM₁₀ 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 (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet 8 Hour Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.075 ppm (147 µg/m ³)		
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	20 µg/m ³		--		
Fine Particulate Matter (PM _{2.5})	24 Hour		Gravimetric or Beta Attenuation	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	12 µg/m ³		15 µg/m ³		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	--	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		--	--	
Nitrogen Dioxide	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	--	Gas Phase Annual Chemiluminescence

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
(NO ₂) ⁸	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			

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 equalled 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 thresholds of significance for projects (Table 3-3). Additionally, 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 4622:** Gasoline Transfer into Motor Vehicle Fuel Tanks. The purpose of this rule is to limit emissions of gasoline vapors from the transfer of gasoline into motor vehicle fuel tanks and applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks with limited exceptions.
- **Rule 5672:** Petroleum Solvent Dry Cleaning Operations. This rule applies to petroleum solvent washers, dryers, solvent filters, settling tanks, vacuum stills, and other containers and conveyors of petroleum solvents that are used in petroleum solvent dry cleaning facilities. This rule requires recordkeeping, test methods, and compliance schedule to limit VOC emissions from petroleum solvent dry cleaning operations.
- **Rule 7070:** This rule incorporates the Airborne Toxic Control Measure (ATCM) for Emissions of Perchloroethylene from Dry Cleaning and Water-Repelling Operations from the California Code of Regulations (CCR) Sections 93109 through 93109.2 and applies to any person who sells or distributes perchloroethylene to dry cleaners in the District or who sells, distributes, installs, owns, or operates dry cleaning equipment in the District that uses solvents that contain perchloroethylene.
- **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.

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

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) ¹	NOx (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Construction²	2.89	1.42	0.008	3.09	0.38	0.20
SJVAPCD Air Quality Thresholds of Significance	100	10	27	10	15	15
1. Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod. 2. Values presented are mitigated emissions calculated 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) ¹	NOx (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Operations²	17.95	3.16	0.05	2.57	5.70	1.55
SJVAPCD Air Quality Thresholds of Significance	100	10	27	10	15	15
1. Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod. 2. Values presented are mitigated emissions calculated 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 approximately 300 feet west of the project site are the closest sensitive receptors. Table 1-1 of the California Air Resources Board Air Quality and Landuse Handbook (2005) identifies source categories with advisory recommendations for distance from sensitive receptors. Of the pollution sources listed, dry cleaning centers and gasoline dispensing facilities are the only uses permitted within the C-3 zone and would therefore be the only sources that could expose sensitive receptors to substantial pollutant concentrations. These uses are subject to separate district permitting under SJVAPCD Rules 4672, 7070, and 4622. These rules are developed specifically to limit toxic pollutant emissions and prevent exposure to sensitive receptors. Therefore, the impact is *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 to the area and would not include any potential odor sources identified in Table 6 of the SJVAPCD’s GAMAQI. The project would not create objectionable odors affecting a substantial number of people and impacts would be *less than significant*.

Mitigation Measures for Air Quality

None Required

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion for this section originates from the Biological Resources 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.

Environmental Setting

The proposed 22.25-acre Project site is comprised of vacant Tulare County Assessor's Parcel Number (APN) 166-240-010-000 and is located in the United States Geological Survey Tulare 7.5-minute quadrangle in Township 19s, Range 24e, section 35, at an elevation of approximately 300 feet above mean sea level. State Route 99 and a chain-link fence parallel the western boundary. East Cartmill Avenue and a sidewalk border the Northern Project boundary, with a three-way intersection and traffic light proximate to the northeast corner of the boundary. To the south and east there are mostly vacant agricultural fields, and active agricultural fields to the northeast of Cartmill Avenue. Two irrigation canals are present

immediately adjacent to the southern and eastern Project boundaries, and a stormwater infiltration basin lies approximately 20 feet south of the southern Project boundary.

On January 8, 2021, Soar Environmental Biologist Travis Albert performed an assessment of the Project site. The purpose of the pedestrian habitat assessment survey was to search for the potential suitable habitat for special-status species that have historically been observed within, or surrounding, the Project area. The edges of the parcel are scattered with Russian thistle (*Kali targus*), a non-native tumble weed, Ripgut brome (*Bromus diandrus*), and other ruderal or perennial grasses. Two irrigation canals are present immediately adjacent to eastern and southern boundaries of the Project site, and a stormwater infiltration basin is present approximately 20 feet south of the southern boundary. One historic powerline pole stands in the middle of the Project area, is not connected to any powerlines, and there are no other powerline poles or trees present within the Project boundary. However, there is an underground AT&T line along the eastern boundary.

The Soar biologist observed a flock of chipping sparrows (*Spizella passerina*) foraging in the field and taking cover in the thickets of switchgrass (*Panicum virgatum*) and Johnson grass (*Sorghum halepense*), located at 36.237502, -119.341409. Three ground squirrel mounds were observed at 36.237426, -119.339963, and the likely species is (*Spermophilus beecheyi*). No other native plant communities, special status species, nor active nests were observed within, or immediately surrounding the Project boundary. The Project site contains potentially suitable habitat for the following special status species: Tipton kangaroo rat (*Dipodomys nitratoideus nitratoideus*), blunt-nosed leopard lizard (*Gambelia silus*), California tiger Salamander (*Ambystoma californiense*), long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), and tricolored blackbird (*Agelaius tricolor*).

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: No species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS) have been identified on the project site or in the project area. The area of the proposed remainder is undeveloped and highly disturbed from agricultural equipment. Ground squirrel burrows are scattered throughout the Project site and surrounding areas. Adjacent agricultural fields contain pockets of potentially suitable nesting bird habitat proximate to the Project site. Preconstruction Surveys and Biological Monitoring for special status species with identified suitable habitat is recommended prior to ground disturbance activities. Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 will reduce potential impacts to sensitive species to a less than significant level. Impacts are *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: No riparian habitat or other sensitive natural communities were observed in the project area or immediate vicinity. 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 CDFW, or 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: There are no vernal pools, wetlands, jurisdictional water features or nexus to Waters of the United States were observed on the property. Therefore, *no impacts* to state or federally

protected wetlands would occur due to the proposed project.

- 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 would not substantially interfere with any native resident or migratory fish or wildlife species. With the mitigation measures proposed, impacts from the project would be less-than-significant. 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. 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: No trees are present on the proposed project site. The project would not conflict with any tree preservation policy or local City ordinance which protect native trees. 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: There are no adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plans for the project site or project area. There is *no impact*.

Mitigation Measures for Biological Resources

Mitigation Measure BIO-1: Irrigation canals, stormwater infiltration basin, and any small mammal burrows within the Project footprint shall be surveyed for California Tiger Salamander (CTS), by a qualified biologist no more than 30 days prior to ground disturbance activities, and verify burrows are clear of any wildlife species when ground disturbing activities occur. All amphibian surveys will be performed in accordance with the most recent USFWS/CDFW survey protocols (USFWS/CDFW 2003).

Mitigation Measure BIO-2: If any small mammal burrows become established with appropriate dimensions, a qualified biologist shall survey the burrows for Tipton kangaroo rat (TKR), Blunt-nosed leopard lizard (BNLL), and CTS no more than 30 days prior to ground disturbance activities. All BNLL surveys will be performed in accordance with the most recent CDFW survey protocols (CDFW 2004), while all CTS surveys will be performed in accordance with the most recent USFWS/CDFW survey protocols (USFWS/CDFW 2003).

Mitigation Measure BIO-3: Project construction should be conducted outside of the bird nesting season (March 1 to September 15). If Project construction occurs during nesting season, a qualified biologist shall conduct a preconstruction survey of the Project site and the surrounding habitat for nesting birds to avoid any adverse impacts leading to nest failure or abandonment. The preconstruction survey will be conducted no more than 30 days before the commencement of Project construction. Areas of particular importance are the switchgrass thickets. Any nests discovered shall be monitored during Project activities for signs of distress. If signs of distress are observed, Project activities shall be adjusted to prevent further disturbances of nesting birds.

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

A Cultural Resources Technical Memorandum was prepared by Taylored Archaeology in February 2021. The Assessment included a Cultural Resources Records Search, Native American Heritage Commission Sacred Lands File Search, Native American Outreach, and archival research.

The records search results indicated that the Project site was previously surveyed for cultural resources and that three prior cultural resource studies were conducted within the Project area and five were conducted within a 0.5-mile radius. No cultural resources were recorded within the Project site. Three cultural resources were recorded within a 0.5-mile radius of the Project area. All three cultural resources were historic era and included: 1) a corrugated metal building adjacent to the northeast corner of the Project site, built circa 1950 and demolished circa 2010, 2) the Liberty Ditch canal, and 3) the Old 99 Ditch of the Tulare Irrigation District.

Archival research included review of historical aerial photographs and historical topographic maps which showed the Project site was historically used for agricultural purposes and no structures appear to have been constructed within the Project boundary. Additionally, a review of A Geoarchaeological Overview and Assessment of Caltrans Districts 6 and 9 shows the City of Tulare as having a moderate sensitivity for archaeological resources.

The Cultural Resources Assessment also included a Native American Heritage Commission Sacred Lands File Search and Native American Outreach, which will be discussed in greater depth in the Tribal Cultural Resources section of this Initial Study. The full Cultural Resources Technical Memorandum is available 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 at the Southern San Joaquin Valley Information Center (SSJVIC) 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 results indicated that there have been three previous cultural resource studies conducted within the Project area, and that five additional cultural resource studies were conducted within one-half mile of the project site. According to the records search, there are not recorded cultural resources within the project site and there are three recorded resources within one-half mile of the project site. These include a corrugated metal building, the Liberty Ditch canal, and the Old 99 Ditch of the Tulare Irrigation District. 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 CUL-2 and CUL-3 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, CUL-2, and CUL-3 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-3 will ensure that impacts remain *less than significant with mitigation incorporation*.

Mitigation Measures for Cultural Resources

Mitigation Measure CUL-1: Prior to the commencement of ground disturbing activities, a qualified archaeologist shall perform a site-specific pedestrian survey for prehistorical and historical deposits. If prehistoric or historic deposits are encountered during the survey, additional investigation may be warranted.

Mitigation Measure CUL-2: In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project area, all work should be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.

Mitigation Measure CUL-3: 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 NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 3-6 below shows the proportion of each energy resource sold to California consumers by SCE in 2019 as compared to the statewide average.

Fuel Type		SCE Power Mix	California Power Mix
Coal		0%	3%
Large Hydroelectric		7.9%	14.6%
Natural Gas		16.1%	34.2%
Nuclear		8.2%	9.0%
Other (Oil/Petroleum Coke/Waste Heat)		0.1%	.02%
Unspecified Sources of Power ¹		32.6%	7.3%
Eligible Renewables	Biomass	0.6%	2.4%
	Geothermal	5.9%	4.8%
	Small Hydro	1.0%	2.0%
	Solar	16%	12.3%
	Wind	11.5%	10.2%
	Total Eligible Renewable	35.1%	31.7%
1. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.			

Table 3-6. 2019 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 is consumed annually within the City of Tulare Urban Development Boundary.

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: Energy use associated with construction and operation of the Project was estimated using CalEEMod (Appendix A) and EMFAC data. Energy calculations are provided in Appendix E and summarized in Tables 3-7 and 3-8, below.

Source	Energy Use	
	Gallons	MBTU
Off-Road Equipment Fuel (Diesel)	52,410	7,285
On-Road Vehicle Fuel (Gasoline)	1,164	135
On-Road Vehicle Fuel (Diesel)	24,420	3394
Total Construction Energy Use		10815
Average Annual Construction Energy Use		7210

Table 3-7. Construction Related Energy Use. Source: CalEEMod & EMFAC (See Appendix E)

Source	Energy Use	
	Fuel Use	
	Gallons/year	MBTU
Mobile Fuel (Diesel)	16,279	2,263
Mobile Fuel (Gasoline)	512,071	59,446
Electricity Use		
	kWh/year	MBTU
Parking Lot	115,220	393
Regional Shopping Center	1,989,960	6,790
Natural Gas Use		
	kBTU/year	MBTU
Natural Gas	2,642,740	2,643
		MBTU
Total Annual Operational Energy Use		71,535

Table 3-8. Operations Related Energy Use. Source: CalEEMod & EMFAC (See Appendix E)

During project construction there would be an increase in energy consumption related to worker trips and operation of construction equipment (Table 3-7). This energy use would be limited to the greatest extent possible through compliance with local, state, and federal regulations.

As shown in Table 3-8, annual energy use associated with project operations would total approximately 71,535 MBTUs per year under 2024 operational conditions. Annual energy use is expected to decrease over time as a result of improvements in vehicle fuel efficiency standards. The proposed Project will be subject to energy conservation requirements in the California Energy Code

(24 CCR Part 6, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (CALGreen) (24 CCR Part 11). Adherence to Title 24 requirements would ensure that the project would not result in wasteful or inefficient use of non-renewable resources due to building operation or vehicle trips. Therefore, potential impacts would *be 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*

Mitigation Measures for Energy

None Required

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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Geologic Stability and Seismic Activity

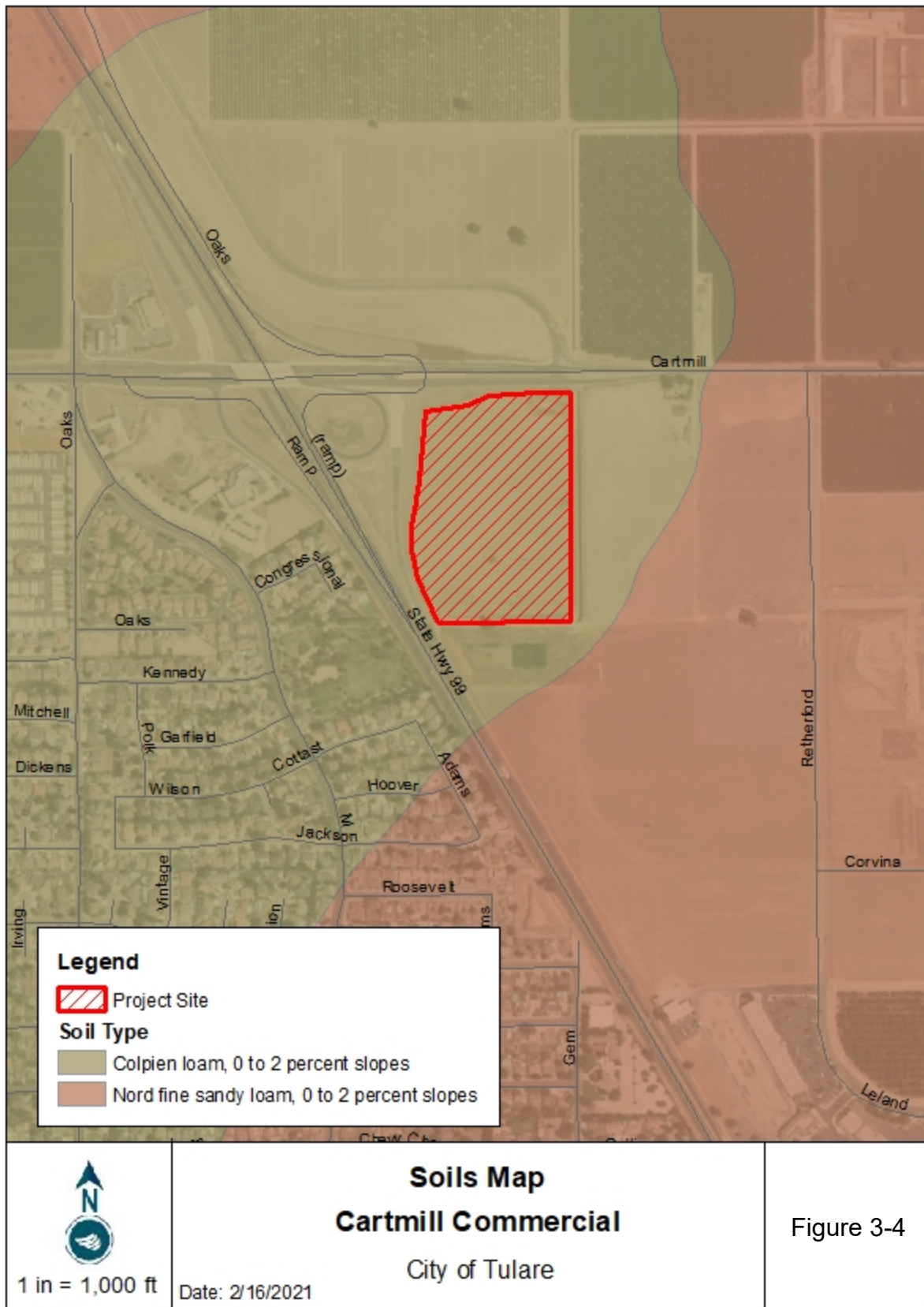
- Seismicity:** Tulare County is considered to be a low to moderate earthquake hazard area. The San Andreas Fault is the longest and most significant fault zone in California and is approximately 40 miles west of the Tulare County Boundary. Owens Valley fault zone is the only active fault located within 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 one soil type. The properties of this soil is described below:

- **Colpien Loam, 0 to 2 percent slopes:** The Colpien series consists of very deep, moderately well drained soils. Colpien soils exhibit negligible to low runoff and moderately slow permeability due to high content of mica in the soil.



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 are unsuitable for liquefaction. According to state soils maps, the project site consists mostly of Colpien loam and does 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. 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 large 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 waste water disposal systems where sewers are not available for the disposal of waste water?**

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*.

Mitigation Measures for Soils and Geology

None Required

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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 34°C 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 3-9. 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 (CH ₄)	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 (CO ₂)	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 and 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 (N ₂ O)	Commonly known as laughing gas, is a chemical compound with the formula N ₂ O. 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 3-9. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

In regards to 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 of 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 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.

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:

Measure 1.3: Energy Efficiency in New Development: 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%.

- 1.3.1 Implement the minimum CALGreen standards for energy efficiency contained in 2008 Title 24 standards, effective January 1, 2010.
- 1.3.2 By 2015, amend the building code and other codes as applicable to require new construction to meet CALGreen measures (A4.203.1 and A.5.203.1.1), as applicable. [At this time, CALGreen Tier 1 mandatory measures A4.203.1 and A.5.203.1.1 1 require new residential and nonresidential buildings, respectively, to exceed California Energy Code requirements, based on the 2008 Energy Efficiency Standards, by 15 percent.]

- 1.3.3 Work with Southern California Edison to implement smart grid technology in new development.

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.

Construction: Greenhouse gasses would be generated during construction from activities including site demolition, site preparation, grading, building construction, application of architectural coatings, and paving. The CalEEMod Emissions report predicts that this project will create a maximum of 731.0 MT of CO₂e emissions per year during construction. Because the SJVAPCD does not have numeric thresholds for assessing the significance of construction-related GHG emissions, predicted emissions from project construction were compared to SCAQMD thresholds for construction related GHG emissions. The SCAQMD currently has a threshold of 10,000 metric tons of CO₂e per year for construction emissions amortized over a 30-year project lifetime. Because project construction would generate far less GHG emissions than this threshold, impacts related to GHG emissions during project construction would be less than significant.

Operation: 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 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 in 2005

	CO ₂ (MT/year)	CH ₄ (MT/year)	N ₂ O (MT/year)	CO ₂ e (MT/year)
2024 Project Operations	5,482.90	3.89	0.023	5,586.86
2005 BAU	12,687.29	6.16	0.023	12,848.11
% Reduction from BAU				56.52%

Table 3-10. Projected Project Operational GHG Emissions Compared to 2005 BAU

The project’s operational GHG emissions and 2005 BAU GHG emissions were estimated using CalEEMod (Attachment A). The Project’s annual GHG emissions are less than the 2005 BAU emissions by 7,261.25 MT CO₂e, which is a 56.5%% reduction. Therefore, the Project would not generate a

cumulatively considerable GHG impact nor would it conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. The impact is *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. As stated above, the project was found to be consistent with SJVAPCD's "Guidance for Valley Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," which states that projects that achieve a 29% GHG emission reduction compared to Business as Usual (BAU) would have a less than significant individual and cumulative impact for GHG. This threshold was specifically developed by SJVAPCD in order to meet the Statewide GHG emissions reduction targets established by AB 32.

The proposed project is consistent with all of the Federal, State, and Local regulations adopted for the purpose of reducing greenhouse gas emissions and there is *no impact*.

Mitigation Measures for Greenhouse Gas Emissions

None Required

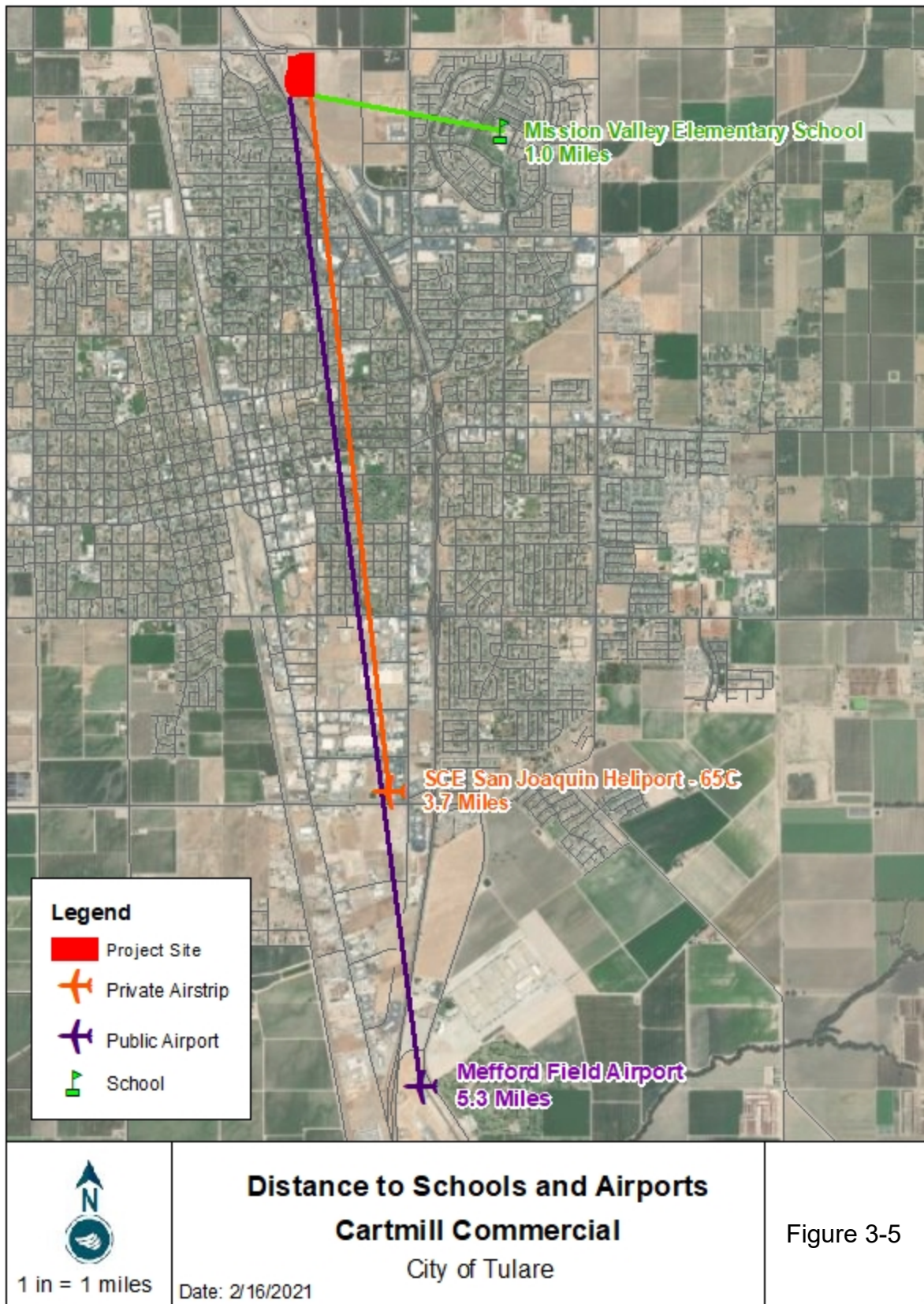
IX. HAZARDS AND HAZARDOUS MATERIALS

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The proposed project site is located approximately 1 mile west of the nearest school (Mission Valley Elementary School), 3.7 miles north of the nearest private airstrip (SCE San Joaquin Heliport) and 5.3 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.

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 would involve the use and transport of hazardous materials, including gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, welding and soldering supplies, pressurized gases, etc. Potential impacts related to the use and transport of hazardous materials during construction would be addressed through implementation of the Storm Water Pollution Prevention Plan (SWPPP). SWPPPs are required to include BMPs to control potential discharges of hazardous pollutants. The Central Valley Regional Water Quality Control Board is responsible for the implementation and enforcement of the SWPPP and would conduct inspections of the project site to ensure effective implementation of the BMPs specified in the SWPPP.

Operation of the project would involve the transport, use, and disposal of small amounts of hazardous materials, including motor vehicle fuel, lubricants, antifreeze, used coolant, janitorial supplies, paint, degreasers, pesticides, herbicides, and fire suppressant. Potential impacts related to the use of hazardous materials during project operations would be addressed through implementation of Hazardous Materials Business Plans (HMBPs) which would be required for each business handling hazardous materials that exceed quantity thresholds established by the Tulare County Health and Human Service Agency, Environmental Health Division. The HMBPs would include a hazardous material inventory, emergency response procedures, training program information, and basic information about the location, type, quantity, and health risks of hazardous materials used or stored on site. Implementation of the HMBPs would ensure that any minor spills or releases of hazardous materials would not pose a significant risk to the public or environment.

In summary, the implementation of HMBPs and SWPPPs required for the project would ensure that hazardous materials used in project construction and operation are handled, stored, and disposed of in accordance with the specified BMPs and plan measures. The potential for impacts to the public and the environment from routine transport, use, and disposal of hazardous materials during project

construction and operation would be *less than significant*.

- 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 a retail commercial development project. As discussed above, the project would be required to implement a SWPPP during project construction and HMBPs during project operations. The SWPPP and HMBPs would include procedures that are specifically developed to prevent significant risk to the public or environment in the event of accident conditions involving the release of hazardous materials. Implementation of the SWPPP and HMBPs will ensure that accident conditions involving the release of hazardous materials would not pose a significant hazard to the public or the environment. As such, impacts are considered *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?**

No Impact: There are no existing or planned schools within 0.25 miles of the proposed Project site. Mission Valley Elementary School is the nearest school and is located approximately 1 mile southeast of the Cartmill Commercial development. Because there are no existing or planned schools within 1 mile of the project site, the potential for hazardous materials releases extending within 0.25 miles of a school is non-existent. Therefore, there is *no impact*.

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

No Impact: The project 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). Therefore, there is *no impact*.

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

No Impact: The 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 5.3 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 Hazards and Hazardous Materials

None Required

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones risk the release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater movement plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Hydrologic System: The proposed project site is located 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 29 active wells, a 125,000 gallon water storage tower, 235 miles of water transmission and distribution mains, and 2,250 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.

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 21-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. 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. As such, implementation of Mitigation Measures HYD-1, HYD-2, and HYD-3 will ensure impacts remain *less than significant with mitigation*.

- 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 30 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 2020 is 11,105.8 million gallons, which is comprised of both groundwater and recycled water.

The total water demand of the proposed project was estimated using the City of Tulare Water System Master Plan, which states that water demand for commercial land uses is approximately 1,300 gallons/day/acre. Based on this information, the proposed 21-acre Project is expected to use approximately 27,300 gallons per day. The proposed Project is consistent with the City's General Plan land use designation. As such, the Project would not affect groundwater supplies in the Kaweah Subbasin beyond what has already been analyzed in the most current General Plan EIR.

The project would result in nearly full development of the site, which would convert approximately 21 acres from pervious surfaces to impervious surfaces. However, this would not significantly interfere with groundwater recharge because all stormwater would be collected and diverted to an existing retention basin located directly south of the project site for groundwater recharge.

Because the addition of impervious surfaces would not interfere substantially with groundwater recharge and the project would not utilize groundwater resources beyond what has been previously analyzed in the City's General Plan EIR, the impact would be *less than significant*.

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 with Mitigation: The proposed project would result in the addition of impervious surfaces and alter existing drainage patterns on the 21-acre project site which would have the potential to result in erosion or siltation on- or off-site. The disturbance of soils during construction could cause erosion, resulting in temporary construction impacts. However, this impact would be appropriately mitigated through implementation of a Stormwater Pollution Prevention Plan (SWPPP) which include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction (Mitigation Measure HYD-1). The Project proponent will also be required to prepare drainage plans (Mitigation Measure HYD-2) and a Development Maintenance Manual (Mitigation Measure HYD-3) to ensure that existing drainage patterns are maintained during project operations and that that the project would not result in substantial erosion or siltation on- or off-site. The impact is *less than significant with implementation of these mitigation measures*.

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 with Mitigation: The proposed project would result in the addition of impervious surfaces on the 21-acre project site which would have the potential to increase surface runoff resulting in flooding on- or off-site. This impact would be appropriately mitigated through implementation of Mitigation Measure HYD-2, which requires the project to submit drainage plans to the City Engineer prior to the issuance of grading permits. The drainage plans will include BMPs to ensure runoff from the project will not result in flooding on- or off-site. Therefore, impacts are *less than significant with mitigation*.

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 result in the addition of impervious surfaces and alter existing drainage patterns on the 21-acre project site which would have the potential to impact existing stormwater drainage systems or provide additional sources of polluted runoff. The disturbance of soils during construction could cause erosion, resulting in temporary construction impacts. However, this impact would be appropriately mitigated through

implementation of a Stormwater Pollution Prevention Plan (SWPPP) which include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction (Mitigation Measure HYD-1).

During project operations, the proposed impervious surfaces, including roads, building pads, and parking areas, would collect automobile derived pollutants such as oils, greases, rubber and heavy metals. This could contribute to point source and non-point source pollution if these pollutants were transported into waterways during storm events. The Project proponent will be required to prepare drainage plans (Mitigation Measure HYD-2) and a Development Maintenance Manual (Mitigation Measure HYD-3) to ensure that the project would not overwhelm existing or planned stormwater drainage systems or result in discharges of polluted runoff into local waterways. The impact is *less than significant with implementation of these mitigation measures*.

iv. Impede or redirect flood flows?

Less than Significant with Mitigation: The proposed project would result in the addition of impervious surfaces on the 21-acre project site which could effect drainage and flood patterns. This impact would be appropriately mitigated through implementation of Mitigation Measure HYD-2, which requires the project to submit drainage plans to the City Engineer prior to the issuance of grading permits. The drainage plans will include BMPs to ensure the project would not impede or redirect flood flows. Therefore, impacts are *less than significant with mitigation*.

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 a flood hazard zone, ocean, or large body of water. 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*.

Mitigation Measures for Hydrology and Water Quality

Mitigation Measure HYD-1: Prior to issuance of grading permits, the Project proponent shall submit a NOI and SWPPP to the RWQCB to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity. The SWPPP shall specify and require the implementation BMPs, with the intent of keeping all products of erosion from moving offsite and into receiving waters during construction. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Recommended BMPs for the construction phase shall include, but are not limited to, the following:

- Stockpiling and disposing of demolition debris, concrete, and soil properly;
- Protecting existing storm drain inlets and stabilizing disturbed areas;
- Implementing erosion controls;
- Properly managing construction materials; and
- Managing waste, aggressively controlling litter, and implementing sediment controls.

The developer shall provide the City of Tulare Engineering Division with evidence of an approved SWPPP prior to issuance of grading permits.

Mitigation Measure HYD-2: Prior to issuance of grading permits, the Project proponent shall prepare a drainage plan for the Project for approval by the City Engineer that identifies postconstruction treatment, control, and design measures that minimize surface water runoff, erosion, siltation, and pollution. The drainage plan shall be prepared in accordance with the City's SWMP and California Stormwater Quality Association's Storm Water Best Management Practices Handbook as well as the City Engineer's Technical Specifications and Public Improvement Standards. During final design of the Project, the Project proponent shall implement a suite of post-construction stormwater treatment and control BMPs designed to address the most likely sources of stormwater pollutants resulting from operation and maintenance of the Project. These measures shall account for the proposed 21 acres of commercial development at the Project site. Stormwater infrastructure will be designed adhering to methods and standards described in Section E.12.e.ii.c of the SWRCB Phase II Small MS4, General Permit (Order No. 2013-0001-DWQ).

The City Engineer may also require other necessary BMPs and design features. Incorporation of City Engineer-approved BMPs and design features into the Project design and construction documents shall ensure that operational water quality exceeds applicable water quality standards. The Project proponent shall also prepare and submit an Operations and Maintenance Agreement to the City of Tulare for its approval identifying appropriate procedures to ensure that stormwater quality control measures work properly during operations.

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.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The proposed project site is located with the northern portion of the City of Tulare. The site is currently vacant and designated for Regional Commercial use under the City of Tulare General Plan and C-3 Retail Commercial under the City of Tulare Zoning Ordinance. The properties to the north, south, east, and west of the site are also planned for Regional Commercial Development but are currently vacant.

Regulatory Setting

City of Tulare General Plan: The Regional Commercial land use designation establishes areas for regional retail centers capable of drawing consumers from outside the UDB. Uses typically allowed include regional malls and outlet centers that contain department stores, comparison, and specialty retail uses with direct and visual arterial and highway access. Developments in this designation typically contain 500,000 or more square feet of commercial space on approximately 20 to 50 acres, although larger sites are possible depending on the uses proposed. The following goals and policies in the City of Tulare General Plan are applicable to the project site's regional commercial land use designation:

Goal LU-4 To promote commercial development that meets present and future needs of Tulare residents, the regional community, and visitors and to enhance economic vitality and sustainability.

- LU-P4.2 Retail Tax Base. The City shall strive to maintain and improve the City's retail and service commercial tax base.
- LU-P4.3 Meeting Consumer Demand. The City shall encourage commercial development which provides for needed commercial opportunities and services currently not available in Tulare.
- LU-P4.4 Regional Retail Center. The City shall continue to promote the development of regional commercial opportunities along the Highway 99 corridor. The City shall facilitate provision of the necessary municipal services to accommodate these opportunities.
- LU-P4.5 Future Commercial Development. The City shall reserve appropriate locations, such as major intersections, for anticipated commercial needs beyond the 2035 timeframe.
- LU-P4.6 Grouping Commercial Development. The City shall avoid continuous "strip commercial" in new development areas by encouraging the clustering of commercial land uses in appropriate locations.
- LU-P4.8 Buffer Commercial Land Uses. The City shall require buffers between commercial and residential land uses through techniques such as landscaping, soundwalls, living walls, berms, fencing, open space setbacks/greenbelts, and building orientation.

- LU-P4.9 Entertainment and Tourism. The City shall promote the development of a regional entertainment venue in the City to increase tourism and provide additional activities to residents.
- LU-P4.10 Regional Auto Mall. The City shall actively promote the development of a regional auto mall to provide additional shopping opportunities to residents and the region.
- LU-P4.12 Commercial Signage. The City shall require that signage in commercial development complement, rather than detract, from the visual quality of the commercial development and surrounding neighborhoods.
- LU-P4.13 Incorporation of Alternative Transportation. Commercial facilities should be designed to encourage and promote transit, pedestrian, and bicycle access. The City shall require, when feasible, that new commercial development be designed to encourage and facilitate pedestrian and bicycle circulation within and between commercial sites and nearby residential areas.
- LU-P4.14 Minimize Visual Impact. The City shall require new commercial development to be designed to minimize the visual impact of parking areas on public roadways.

City of Tulare Code of Ordinances Chapter 12.5: The C-3 Service Commercial Zone is intended to provide for a wide variety of commercial and office uses that serve the general commercial needs of the residents of Tulare.

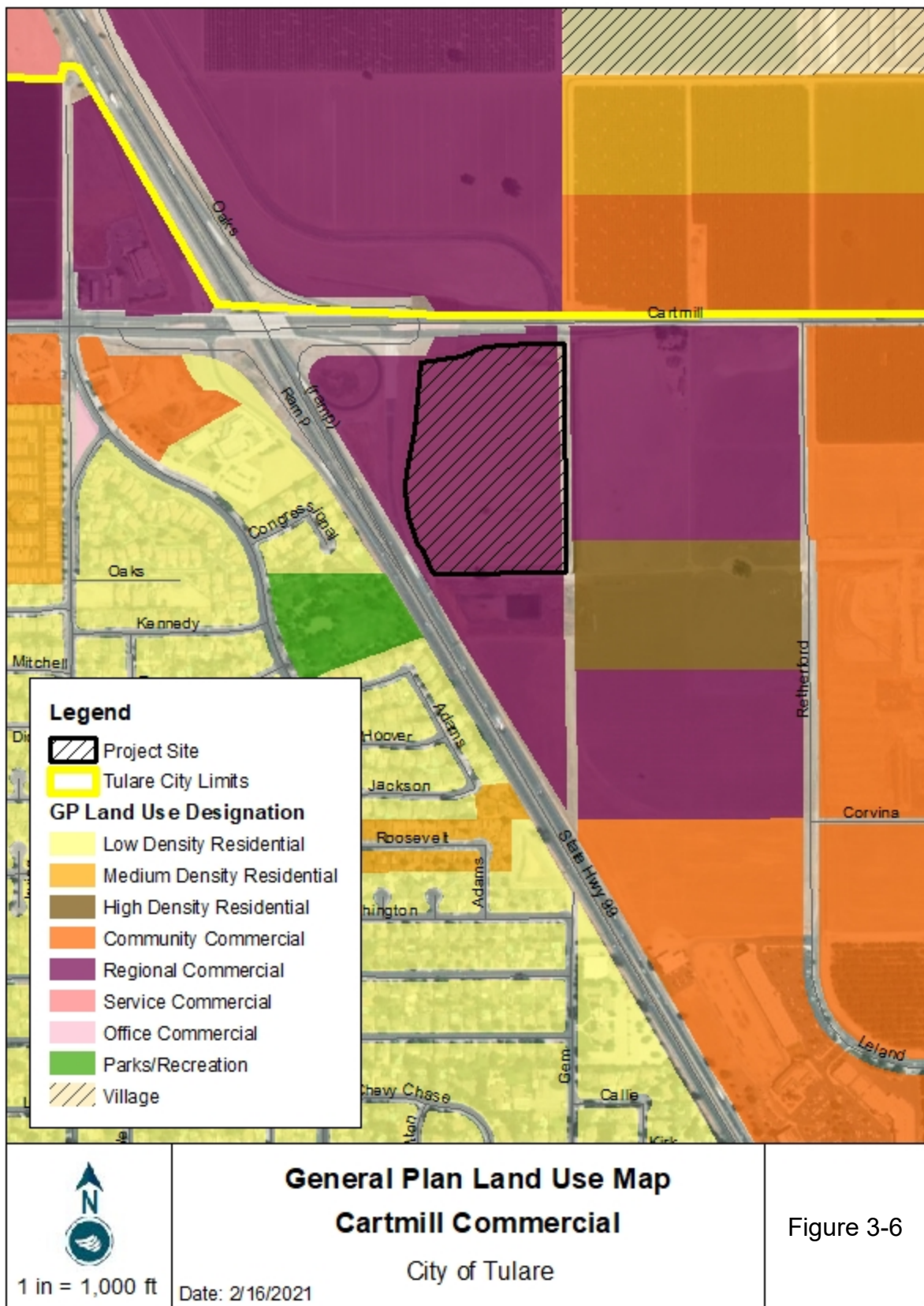
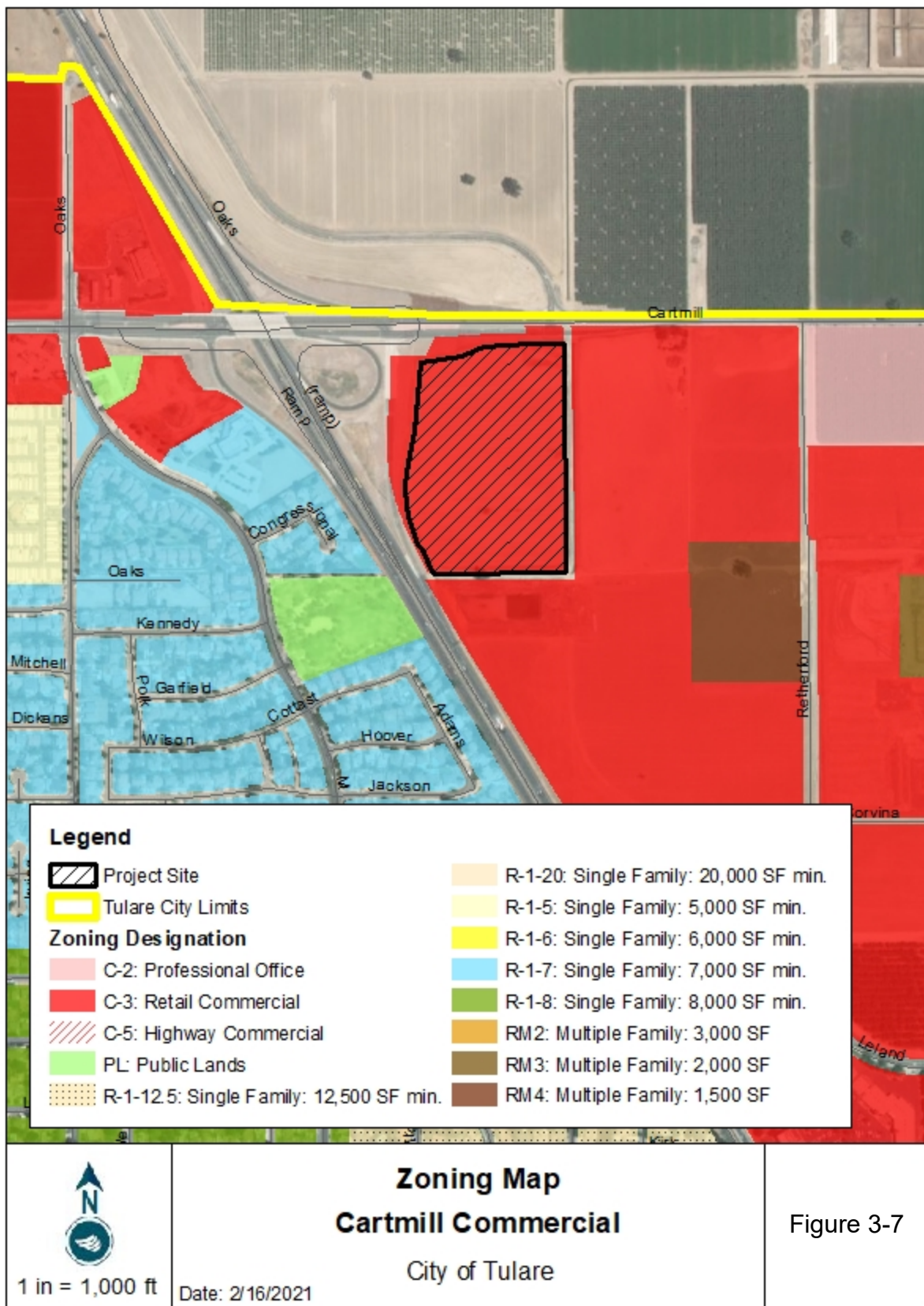


Figure 3-6



Discussion**a) Would the project physically divide an established community?**

No Impact: The project proposes a tentative parcel map and commercial development on a property that is planned for commercial use. The project would provide pedestrian and vehicular connectivity and would not act 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*.

Mitigation Measures for Land Use and Planning

None Required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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*.

Mitigation Measures for Mineral Resources

None Required

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 permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground-borne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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-P1.1 Noise-Impacted Areas. Areas within Tulare County shall be designated as noise-impacted if exposed to existing or projected future noise levels at the exterior of buildings which exceed 60 dB Ldn (or CNEL). Maps which indicate areas exposed to existing or projected future noise levels exceeding 60 dB Ldn (or CNEL) for the major noise sources identified in Figure 7-1 are included in Appendix B of the Policy Document.

- NOI-P1.2 Sound Attenuation Features. The City shall require sound attenuation features such as walls, berming, heavy landscaping, and setbacks between commercial, industrial, and residential uses to reduce noise and vibration impacts.
- NOI-P1.3 Noise Buffering. The City shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks.
- NOI-P1.4 Coordinate with Caltrans. Actively coordinate with Caltrans, neighboring jurisdictions, and other transportation providers during the planning and design phases of proposed roadway projects so that noise impacts are minimized and appropriate noise mitigation measures are provided.
- 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-P1.12 Noise Ordinance. Maintain, enforce, and update as necessary the City of Tulare Noise Ordinance to prevent transmission of excessive noise between properties.
- NOI-P1.13 Noise Ordinance – Limits on Hours of Operation. Amend the noise ordinance to include limits on the intensity and hours of use for selected noise sources such as construction equipment, manufacturing equipment, motors, delivery trucks, and parking lot vacuum equipment. Limits on hours of operation should be consistent with and achieve the goals of the land use compatibility standards.
- 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).

Goal NOI-3 Amended policies from resolution 3432

- NOI-P3.3 New development of industrial, commercial, or other noise generating land uses (including roadways, railroads, and airports) may not be permitted if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas containing or planned and zoned for residential or other noise sensitive land uses, unless it can be shown through acoustical analysis that the noise generated would be mitigated to levels compatible with the adjacent sensitive uses.
- NOI-P3.4 Noise level criteria applied to land uses other than residential or other noise-sensitive uses shall be consistent with the recommendations of the State of California General Plan Guidelines.
- NOI-P3.5 Tulare County and its incorporated cities shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code (UBC). Title 24 requires that interior noise levels not exceed 45 dB Ldn (or CNEL) with the windows and doors closed within new developments of multi-family dwellings, condominiums, hotels or motels. UBC Chapter 35 requires that common wall and floor/ceiling assemblies within multi-family dwellings comply with minimum standards concerning the transmission of airborne sound

and structure-borne impact noise. Title 24 requires that conformance with the abovedescribed standards be documented by the submission of an acoustical analysis whenever new multi-family dwellings, condominiums, hotels or motels are proposed for areas within the 60 dB Ldn (or CNEL) contour of a major noise source as determined by the local jurisdiction.

- NOI-P3.8 New development of industrial, commercial, or other noise generating land uses will not be permitted if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas planned and zoned for residential or other noise-sensitive land uses, unless determined to be necessary to promote the public health, safety, and welfare of the County.
- NOI-P3.10 Noise level criteria applied to land uses other than residential or other noise sensitive uses shall be consistent with the recommendations of the California Office of Noise Control (Figure 7-3).

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 18 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
Cranes	83
Forklifts	75
Generators	81
Pavers	89
Rollers	74
Tractors	84
Loaders	85
Backhoes	80
Graders	85
Scrapers	89
Welders	74

*Table 3-11. 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 would include those generated from traffic and onsite operations. Businesses within the proposed Project would also be required to comply with the City of Tulare Noise Ordinance, which restricts hours of operation for noise-generating activities between 6:00 AM and 10:00 PM. The single-family residences located approximately 300 feet west of the project site are the closest sensitive receptors to the Project. Highway 99 runs in between the proposed project site and these single-family residences and is the primary source of noise for these sensitive receptors. It is highly unlikely that the proposed project would generate noise in excess of noise generated by the highway. Additionally, the existing block wall used to protect these residences from highway-related noise impacts would further reduce project-related noise impacts on sensitive receptors.

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 not exceed existing ambient noise levels, 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 5.3 miles away from the proposed project site. There is *no impact*.

Mitigation Measures for Noise

None Required

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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The United States Census Bureau estimated the population in the City of Tulare to be 63,547 persons in 2019. This is an increase from the 2010 census, which counted the population in the City of Tulare to be 59,469. 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.

The Proposed project site is designated by the City's General Plan as Regional Commercial and is zoned C-3 Retail Commercial. No residences are permitted within these land use designations.

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 63,547 persons in 2019. The Project does not propose any new residences and would therefore not directly induce population growth. It is anticipated that employees needed for retail operations would be drawn from the existing population. Therefore, the project would not induce substantial unplanned population growth in the area and the impact is considered *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*.

Mitigation Measures for Population and Housing

None Required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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.

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.

Schools: The proposed project site is located within the Tulare School District. The nearest school, Mission Valley Elementary School, is located .26 miles north-west of 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 #63, located approximately 0.3 miles west of the project site at 2900 M Street. The new commercial development be required to comply with Title 24 of the California Building Code, which requires all new commercial buildings to have adequate fire suppression facilities. Prior to recordation of the subdivision map, the project proponent will be required to enter into an agreement with the City to contribute towards necessary fire protection equipment and/or facilities as determined through negotiations between the City and the applicant.

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 south of the proposed project site. 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 21-acre commercial development would increase the demand for police coverage. However, the project would compensate for the increased demand in law enforcement services by paying the appropriate development fees based on the City's adopted fee calculations. While the payment of development fees could result in the construction of new or altered police facilities, no specific projects have been identified at this time. 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?

No Impact: The proposed project is within the Tulare City Elementary School District and Tulare Joint Union High School District. The Project does not propose any new residences and would therefore not increase the number of students in the School District. There is no impact.

d. Parks?

No Impact: The proposed Project does not include any new residences and would not increase the demand for parks or lower the level of service for existing parks. There is *no impact*.

e. Other public facilities?

Less than Significant Impact: The proposed project would be required to pay development impact fees to offset increased demand for public services related to transportation, water, wastewater, groundwater recharge, storm drainage, and general governmental services. Fees for transportation, water, wastewater, and general government are based on building square footage and will be calculated prior to the issuance of building permits. Fees for groundwater recharge and storm drainage are based on site acreage. Fees to offset city costs related to groundwater recharge will be \$1,172 per acre, or \$24,612 for the 21-acre development. Fees to offset City costs related to storm drainage infrastructure and maintenance will be \$4,874 per acre, or \$102,354 for the 21-acre development.

While the payment of development fees could result in the construction of new or altered public service facilities, no specific projects have been identified at this time. As new or expanded public 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*.

Mitigation Measures for Public Services

None Required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

There are 20 parks that are owned and operated by The City of Tulare. Blain Park is the closest recreational area to the project site and is located approximately 300 feet 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 identifies the City's goal to provide parks and recreation facilities and services that adequately meet the existing and future needs of all Tulare residents.

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?**

No Impact: The proposed project does not include a residential component and would not increase use of existing park facilities. There is *no impact*.

- 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?**

No Impact: The proposed project does not include recreational facilities and would not increase the demand for recreational facilities such that it could require the construction of new or expanded recreational facilities. There is *no impact*.

Mitigation Measures for Parks and Recreation

None Required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict or be inconsistent with the CEQA guidelines Section 15064.3, Subdivision (B)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Vehicular Access: Vehicular access to the project is available from Cartmill Avenue and Gem Street. The City of Tulare is the primary authority for major arterial and local streets. Other transportation facilities include a network of drive aisles within the proposed project site property. These will provide full access to all buildings within the development.

Parking: During construction, workers will utilize temporary construction staging areas for parking of vehicles and equipment. The commercial development will include parking areas consistent with City of Tulare standards.

Pedestrian and Cyclist Connectivity: The Project will build out Gem Street along the eastern property boundary. Gem street will include sidewalks which will connect to future sidewalks on E Cartmill Avenue. Sidewalks, crosswalks, and pedestrian paths will be provided within the development to provide pedestrian connectivity between the commercial buildings. Class II bicycle lanes are present on Cartmill Avenue. Cyclists using this route would be able to utilize the vehicular travel lanes or sidewalk on Gem street to access the proposed development.

Regulatory Setting

CA OPR Technical Advisory on Evaluating Transportation Impacts in CEQA: The State of California Governor's Office of Planning and Research document entitled Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018 (Technical Advisory) provides guidance for determining a project's transportation impacts based on VMT. For retail projects, the Technical Advisory indicates: "Generally, lead agencies should analyze the effects of a retail project by assessing the change in total VMT because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns." The Technical Advisory's recommended significance threshold for retail projects is stated as follows: "A net increase in total VMT may indicate a significant transportation impact."

The Technical Advisory also states the following: “Because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project’s transportation impacts.

“By adding retail opportunities into the urban fabric and thereby improving retail destination, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact. Regional-serving retail development, on the other hand, which can lead to substitution of longer trips for shorter ones, may tend to have a significant impact. Where such development decreases VMT, lead agencies should consider the impact to be less-than significant.

“Many cities and counties define local-serving and regional-serving retail in their zoning codes. Lead agencies may refer to those local definitions when available, but should also consider any project-specific information, such as market studies or economic impacts analyses that might bear on customers’ travel behavior. Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving. Generally, however, retail development including stores larger than 50,000 square feet might be considered regional-serving, and so lead agencies should undertake an analysis to determine whether the project might increase or decrease VMT.”

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 a 21 acre commercial development and would include build-out of Gem Street and on-site circulation-related infrastructure improvements, including driveways and interior drive aisles. 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: It is anticipated that the development that will occur on the Project site would consist of local-serving retail uses and uses that would attract trips from the adjacent freeway. Since there is already a regional shopping center in the area (Tulare Outlets), it is unlikely that the Project would be developed as a regional center, or that it would generate new regional trips not already occurring at the Tulare Outlets. Furthermore, by constructing new C-3 zoning opportunities in Tulare, the need to travel longer distances to Visalia is reduced. Finally, with a maximum parcel size of 3.38 acres, stores larger than 50,000 square feet are not likely to be constructed. As such, it is recommended that the Project be presumed to cause a *less-than significant impact*.

- 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: No public roadway design features or incompatible uses are included in the proposed project. All equipment will remain on-site and outside of public right-of-way (R-O-W). There is *no impact*.

- d) **Would the project result in inadequate emergency access?**

No Impact: This project would not result in inadequate emergency access. Emergency access to the site would be via Cartmill Avenue and Gem Street. A network of drive aisles within the proposed project property provides full access to all buildings within the commercial development. The Project would have *no impact* on emergency access.

Mitigation Measures for Transportation

None Required

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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

A Cultural Resources Technical Memorandum was prepared by Taylored Archaeology in February 2021. The Assessment included a Cultural Resources Records Search, Native American Heritage Commission Sacred Lands File Search, Native American Outreach, and archival research. The full Cultural Resources Technical Memorandum is available in Appendix C.

Cultural Resource Record Search and Archival Research

The records search results indicated that the Project site was previously surveyed for cultural resources and that three prior cultural resource studies were conducted within the Project area and five were conducted within a 0.5-mile radius. No cultural resources were recorded within the Project site. Three cultural resources were recorded within a 0.5-mile radius of the Project area. All three cultural resources were historic era and no tribal cultural resources were identified. Additionally, a review of A Geoarchaeological Overview and Assessment of Caltrans Districts 6 and 9 shows the City of Tulare as having a moderate sensitivity for archaeological resources.

Native American Heritage Commission and Native American Outreach

On January 8, 2021, Taylored Archaeology requested a search of the Native American Heritage Commission (NAHC) Sacred Lands File and for a list of Native American individuals or groups associated with the project area who might have information relating to resources to identify any resources within the project area. NAHC responded on January 27, 2021, stating that the results of any Sacred Lands File (SLF) reviewed is negative (Attachment C of Appendix C).

A letter was sent to all tribes with potential knowledge of cultural resources in the Project area on January 28, 2021. Kerri Vera, Director of the Department of Environmental Protection for the Tule River Indian Tribe, replied stating that the tribe had no knowledge of culturally sensitive items or sites within the proposed Project area, and requested to be consulted if items or sites are revealed during research or ground disturbance. Samantha McCarty, a Cultural Specialist from the Santa Rosa Rancheria Tachi Yokut Tribe, responded stating that the Tribe had concerns with the project and requested that the Tribe be retained for a cultural presentation for all construction staff and to be notified of archaeological survey results, archaeological record search results, and any discoveries made related to the project. No other comments were received from any other of the tribes contacted via letter on January 28, 2021, with email and phone call follow-up.

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 cultural resources records search, NAHC SLF search, and tribal outreach, no previously recorded tribal cultural resources are located within the project site. Although no tribal cultural resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures TCR-1, CUL-1, CUL-2, and CUL-3 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 human remains buried within the project area's vicinity. However, 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, CUL-1, CUL-2, and CUL-3 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: 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.

Mitigation Measure CUL-1: Prior to the commencement of ground disturbing activities, a qualified archaeologist shall perform a site-specific pedestrian survey for prehistorical and historical deposits. If prehistoric or historic deposits are encountered during the survey, additional investigation may be warranted.

Mitigation Measure CUL-2: In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project area, all work should be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.

Mitigation Measure CUL-3: 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 NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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. The City of Tulare operates 29 active wells, a 125,000 gallon water storage tower, 235 miles of water transmission and distribution mains, and 2,250 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.

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 Water's 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 proposed Project would tie into the City's sewer system, which operates two wastewater treatment plants operate in accordance with the Central Valley Regional Water Quality Control Board Waste Discharge Requirements (WDR) Order NO. R5-2002-0186. The domestic wastewater treatment plant (DWWTP) is the facility that would be used to treat wastewater from the proposed project and has an estimated capacity of 6.0 million gallons/day (MGD) but currently treats approximately 3.5 MGD. Based on calculations from the City of Tulare Sewer System Master Plan Table 3.7, the proposed Project is estimated to generate approximately 10,500 gallons of wastewater per day, which would be approximately 0.42% of the remaining capacity. Furthermore, sewer services for the proposed

project are planned for in the City's Sewer System Master Plan. It is not anticipated that new wastewater treatment facilities would be required.

The proposed Project would tie into the City's stormwater system. All stormwater will be collected and diverted to an existing retention basin located directly south of the Project site. This basin has adequate capacity to accommodate the proposed project and it is not anticipated that new stormwater facilities would be required.

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 upon development. The City's water supply source is comprised of 30 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 2020 is 11,105.8 million gallons, which is comprised of both groundwater and recycled water.

The total water demand of the proposed project was estimated using the City of Tulare Water System Master Plan, which states that water demand for commercial land uses is approximately 1,300 gallons/day/acre. Based on this information, the proposed 21-acre Project is expected to use approximately 27,300 gallons per day. The proposed Project is consistent with the City's General Plan land use designation. As such, the Project would not affect water supplies beyond what has already been analyzed in the most current General Plan EIR and impacts would be *less than significant*.

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

Less Than Significant Impact: 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 plant (DWWTP), which has a capacity of 6.0 million gallons/day (MGD) but currently treats approximately 3.5 MGD. Based on calculations from the City of Tulare Sewer System Master Plan Table 3.7, the proposed Project is estimated to generate approximately 10,500 gallons of wastewater per day, which would be approximately 0.42% of the remaining capacity. Although the proposed project will increase wastewater generation due to the new commercial development, the project is consistent with the City's General Plan Land Use Designation and the City's DWWTP was designed to accommodate this planned growth. Therefore, the project would not exceed the City's WWTF capacity of 6.0 MGD and would not impact wastewater treatment facilities beyond what has already been analyzed in the most current General Plan EIR. 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.

Mitigation Measures for Utilities and Service Systems

None Required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 is not located in an area classified as a Fire Hazard Severity Zone and 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 little 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?**

No 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 project is not located in an area classified as a Fire Hazard Severity Zone and the proposed project would not exacerbate fire risk. There is *no impact*.

- 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 not located in an area designated as a Fire Hazard Severity Zone and lands associated with the Project site are relatively flat. 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*.

Mitigation Measures for Wildfire

None Required

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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, 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 increase 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 Cartmill Commercial Project proposed by Cartmill Commons, LLC 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: Irrigation canals, stormwater infiltration basin, and any small mammal burrows within the Project footprint shall be surveyed for California Tiger Salamander (CTS), by a qualified biologist no more than 30 days prior to ground disturbance activities, and verify burrows are clear of any wildlife species when ground disturbing activities occur. All amphibian surveys will be performed in accordance with the most recent USFWS/CDFW survey protocols (USFWS/CDFW 2003).	Project Sponsor	Within 30 days prior to the start of construction	City of Tulare	
Mitigation Measure BIO-2: If any small mammal burrows become established with appropriate dimensions, a qualified biologist shall survey the burrows for Tipton kangaroo rat (TKR), Blunt-nosed leopard lizard (BNLL), and CTS no more than 30 days prior to ground disturbance activities. All BNLL surveys will be performed in accordance with the most recent CDFW survey protocols (CDFW 2004), while all CTS surveys will be performed in accordance with the most recent USFWS/CDFW survey protocols (USFWS/CDFW 2003).	Project Sponsor	Within 30 days prior to the start of construction.	City of Tulare	
Mitigation Measure BIO-3: Project construction should be conducted outside of the bird nesting season (March 1 to September 15). If Project construction occurs during nesting season, a qualified biologist shall conduct a preconstruction survey of the Project site and the surrounding habitat for nesting birds to avoid any adverse impacts leading to nest failure or abandonment. The preconstruction survey	Project Sponsor	Within 30 days prior to the start of construction.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
will be conducted no more than 30 days before the commencement of Project construction. Areas of particular importance are the switchgrass thickets. Any nests discovered shall be monitored during Project activities for signs of distress. If signs of distress are observed, Project activities shall be adjusted to prevent further disturbances of nesting birds.				
Mitigation Measure CUL-1: Prior to the commencement of ground disturbing activities, a qualified archaeologist shall perform a site-specific pedestrian survey for prehistorical and historical deposits. If prehistoric or historic deposits are encountered during the survey, additional investigation may be warranted.	Project Sponsor	Prior to the Start of Construction	City of Tulare	
Mitigation Measure CUL-2: In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project area, all work should be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.	Project Sponsor	Ongoing During Construction	City of Tulare	
Mitigation Measure CUL-3: 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 NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.	Project Sponsor	Ongoing During Construction	City of Tulare	
Mitigation Measure HYD-1: Prior to issuance of grading permits, the Project proponent shall submit a NOI and SWPPP to the RWQCB to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity. The SWPPP shall specify and require the implementation BMPs, with the intent of keeping all products of erosion from moving offsite and into receiving waters during construction. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Recommended BMPs for the construction phase shall include, but are not limited to, the following:	Project Sponsor	Prior to issuance of grading permits.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
<ul style="list-style-type: none"> • Stockpiling and disposing of demolition debris, concrete, and soil properly; • Protecting existing storm drain inlets and stabilizing disturbed areas; • Implementing erosion controls; • Properly managing construction materials; and • Managing waste, aggressively controlling litter, and implementing sediment controls. <p>The developer shall provide the City of Tulare Engineering Division with evidence of an approved SWPPP prior to issuance of grading permits.</p>				
<p>Mitigation Measure HYD-2: Prior to issuance of grading permits, the Project proponent shall prepare a drainage plan for the Project for approval by the City Engineer that identifies postconstruction treatment, control, and design measures that minimize surface water runoff, erosion, siltation, and pollution. The drainage plan shall be prepared in accordance with the City's SWMP and California Stormwater Quality Association's Storm Water Best Management Practices Handbook as well as the City Engineer's Technical Specifications and Public Improvement Standards. During final design of the Project, the Project proponent shall implement a suite of post-construction stormwater treatment and control BMPs designed to address the most likely sources of stormwater pollutants resulting from operation and maintenance of the Project. These measures shall account for the proposed 21 acres of commercial development at the Project site. Stormwater infrastructure will be designed adhering to methods and standards described in Section E.12.e.ii.c of the SWRCB Phase II Small MS4, General Permit (Order No. 2013-0001-DWQ).</p> <p>The City Engineer may also require other necessary BMPs and design features. Incorporation of City Engineer-approved BMPs and design features into the Project design and construction documents shall ensure that operational water quality exceeds applicable water quality standards. The Project proponent shall also prepare and submit an Operations and Maintenance Agreement to the City of Tulare for its approval identifying appropriate procedures to ensure that stormwater quality control measures work properly during operations.</p>	Project Sponsor	Prior to issuance of grading permits.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
<p>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:</p> <ul style="list-style-type: none"> • 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. 	Project Sponsor	Prior to issuance of grading permits.	City of Tulare	
<p>Mitigation Measure TCR-1: 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.</p>	Project Sponsor	Prior to issuance of grading permits.	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 2015 Urban Water Management Plan
6. City of Tulare Zoning Ordinance
7. City of Tulare Sewer System Master Plan
8. City of Tulare Storm Drainage Master Plan
9. City of Tulare Water System Master Plan
10. Engineering Standards, City of Tulare
11. SJVAPCD Regulations and Guidelines
12. Flood Insurance Rate Maps
13. California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
14. 2008 (California Environmental Quality Act CEQA Guidelines
15. California Building Code
16. California Stormwater Pollution Prevention Program (SWPPP)
17. "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
18. Government Code Section 65962.5
19. California Environmental Protection Agency (CEPA)
20. Cypher, Brian, Et Al. Conservation of Endangered Tipton Kangaroo Rats (*Dipodomys Nitratoidea*): Status Surveys, Habitat Suitability, And Conservation Strategies. California Department Of Fish And Wildlife, 2016.
21. California Energy Efficiency Strategic Plan: New Residential Zero Net Energy Action Plan 2015-2020, June 2015
22. San Joaquin Valley Air Pollution Control District Mitigation Measures (<http://www.valleyair.org/transportation/Mitigation-Measures.pdf>)
23. "Residential Water Use Trends and Implications for Conservation Policy." Legislative Analyst's Office/The California Legislature's Nonpartisan Fiscal and Policy Advisor. March 2017.
24. Riverpark Truck Trip Survey (2013)
25. 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: Cartmill Commercial

List of Preparers

4-Creeks Inc.

- David Duda, AICP, GISP
- 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

Taylored Archaeology

- Consuelo Sauls, Archaeologist

Peters Engineering Group

- John Rowland, PE, TE

SOAR Environmental Consulting

- Travis Albert, Biologist
- Jon Sarquis, Sr. Marketing Manager

Appendix A

CalEEMod Reports

Cartmill Commons - Tulare County, Annual

Cartmill Commons
Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	823.00	Space	7.41	329,200.00	0
Regional Shopping Center	246.99	1000sqft	5.67	246,985.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	3			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Cartmill Commons - Tulare County, Annual

Project Characteristics -

Land Use - Building Square footage calculated based on maximum Floor Area Ratio for Regional Commercial Land Use (City of Tulare General Plan).
 914,760 sf total lot area x 0.27 max FAR = 246,985 max building sf
 Parking spaces estimated using 1 space/300 sf

Construction Phase -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Fleet Mix - Project Specific Fleet Mix for Retail

Area Coating -

Energy Use -

Table Name	Column Name	Default Value	New Value
tb\FleetMix	HHD	0.08	1.3090e-003
tb\FleetMix	LDA	0.54	0.65
tb\FleetMix	LDT1	0.03	0.03
tb\FleetMix	LDT2	0.18	0.21
tb\FleetMix	LHD1	0.02	8.0900e-004
tb\FleetMix	LHD2	4.5440e-003	8.0890e-004
tb\FleetMix	MCY	4.1210e-003	3.8120e-003
tb\FleetMix	MDV	0.12	0.10
tb\FleetMix	MH	6.2200e-004	4.4300e-004
tb\FleetMix	MHD	0.02	3.5360e-003
tb\FleetMix	OBUS	1.8130e-003	1.7600e-003
tb\FleetMix	SBUS	1.0750e-003	9.4700e-004
tb\FleetMix	UBUS	1.1770e-003	9.6500e-004
tbLandUse	LandUseSquareFeet	246,990.00	246,985.00

2.0 Emissions Summary

Cartmill Commons - Tulare County, Annual

2.1 Overall Construction**Unmitigated Construction**

Year	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
tons/yr																
2021	0.1972	1.9235	1.4725	3.6400e-003	0.3081	0.0761	0.3842	0.1274	0.0707	0.1981	0.0000	326.1775	326.1775	0.0575	0.0000	327.6149
2022	1.4207	3.0887	2.8856	8.0700e-003	0.2711	0.1027	0.3738	0.0737	0.0966	0.1703	0.0000	728.8417	728.8417	0.0862	0.0000	730.9976
2023	0.7157	5.5900e-003	0.0113	2.0000e-005	1.3700e-003	2.9000e-004	1.6600e-003	3.6000e-004	2.9000e-004	6.6000e-004	0.0000	2.0803	2.0803	9.0000e-005	0.0000	2.0825
Maximum	1.4207	3.0887	2.8856	8.0700e-003	0.3081	0.1027	0.3842	0.1274	0.0966	0.1981	0.0000	728.8417	728.8417	0.0862	0.0000	730.9976

Mitigated Construction

Year	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
tons/yr																
2021	0.1972	1.9235	1.4725	3.6400e-003	0.3081	0.0761	0.3842	0.1274	0.0707	0.1981	0.0000	326.1773	326.1773	0.0575	0.0000	327.6147
2022	1.4207	3.0887	2.8856	8.0700e-003	0.2711	0.1027	0.3738	0.0737	0.0966	0.1703	0.0000	728.8413	728.8413	0.0862	0.0000	730.9972
2023	0.7157	5.5900e-003	0.0113	2.0000e-005	1.3700e-003	2.9000e-004	1.6600e-003	3.6000e-004	2.9000e-004	6.6000e-004	0.0000	2.0803	2.0803	9.0000e-005	0.0000	2.0825
Maximum	1.4207	3.0887	2.8856	8.0700e-003	0.3081	0.1027	0.3842	0.1274	0.0966	0.1981	0.0000	728.8413	728.8413	0.0862	0.0000	730.9972

Carroll Commons - Tulare County, Annual

2.2 Overall Operational

Unmitigated Operational

Category	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
tons/yr											MT/yr					
Area	1.1654	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204
Energy	0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	819.1001	819.1001	0.0307	8.3800e-003	822.3640
Mobile	2.0424	2.6892	19.8560	0.0584	6.6122	0.0426	6.6548	1.7622	0.0393	1.8015	0.0000	5,297.629 ⁶	5,297.629 ⁶	0.1669	0.0000	5,301.801 ⁶
Waste						0.0000	0.0000		0.0000	0.0000	52.6437	0.0000	52.6437	3.1112	0.0000	130.4225
Water						0.0000	0.0000		0.0000	0.0000	5.8042	44.0466	49.8508	0.5980	0.0145	69.1069
Total	3.2220	2.8188	19.9747	0.0592	6.6122	0.0525	6.6647	1.7622	0.0492	1.8114	58.4479	6,160,795 ⁵	6,219,243 ⁴	3.9068	0.0228	6,323,715 ⁴

Cartmill Commons - Tulare County, Annual

2.2 Overall Operational

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr											MT/yr					
Area	1.1654	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204
Energy	0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	811.7815	811.7815	0.0304	8.3100e-003	815.0192
Mobile	1.9841	2.4438	17.8331	0.0504	5.6535	0.0378	5.6913	1.5067	0.0349	1.5416	0.0000	4,568.601 ²	4,568.601 ²	0.1476	0.0000	4,572.291 ¹
Waste						0.0000	0.0000		0.0000	0.0000	52.6437	0.0000	52.6437	3.1112	0.0000	130.4225
Water						0.0000	0.0000		0.0000	0.0000	5.8042	44.0466	49.8508	0.5980	0.0145	69.1069
Total	3.1638	2.5735	17.9517	0.0511	5.6535	0.0477	5.7012	1.5067	0.0448	1.5515	56.4479	5,424.448 ⁵	5,482.896 ⁴	3.8872	0.0228	5,586.860 ⁰

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.81	8.71	10.13	13.56	14.50	9.13	14.46	14.50	8.99	14.35	0.00	11.95	11.84	0.50	0.31	11.65

3.0 Construction Detail

Construction Phase

Cartmill Commons - Tulare County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	• Site Preparation	• Site Preparation	7/29/2021	8/11/2021	5	10	
2	• Grading	• Grading	8/12/2021	9/22/2021	5	30	
3	• Building Construction	• Building Construction	9/23/2021	11/16/2022	5	300	
4	• Paving	• Paving	11/17/2022	12/14/2022	5	20	
5	• Architectural Coating	• Architectural Coating	12/15/2022	1/11/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 7.41

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 370,478; Non-Residential Outdoor: 123,493; Striped Parking Area: 19,752 (Architectural Coating – sqft)

OffRoad Equipment

Cartmill Commons - Tulare County, Annual

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

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	217.00	94.00	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	43.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction**3.2 Site Preparation - 2021****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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970
Total	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970

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3.2 Site Preparation - 2021**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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970
Total	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970

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3.3 Grading - 2021

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7425	81.7425	0.0264	0.0000	82.4034
Total	0.0629	0.6960	0.4632	9.3000e-004	0.1301	0.0298	0.1599	0.0540	0.0274	0.0814	0.0000	81.7425	81.7425	0.0264	0.0000	82.4034

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	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901
Total	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901

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3.3 Grading - 2021

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7424	81.7424	0.0264	0.0000	82.4033
Total	0.0629	0.6960	0.4632	9.3000e-004	0.1301	0.0298	0.1599	0.0540	0.0274	0.0814	0.0000	81.7424	81.7424	0.0264	0.0000	82.4033

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	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901
Total	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901

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3.4 Building Construction - 2021

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															
Off-Road	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3894	83.3894	0.0201	0.0000	83.8924
Total	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3894	83.3894	0.0201	0.0000	83.8924

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	0.0109	0.3746	0.0715	9.5000e-004	0.0224	1.0900e-003	0.0235	6.4600e-003	1.0500e-003	7.5100e-003	0.0000	89.9576	89.9576	3.9800e-003	0.0000	90.0570
Worker	0.0339	0.0218	0.2242	5.7000e-004	0.0622	4.2000e-004	0.0627	0.0165	3.9000e-004	0.0169	0.0000	51.7849	51.7849	1.4800e-003	0.0000	51.8219
Total	0.0447	0.3964	0.2957	1.5200e-003	0.0846	1.5100e-003	0.0861	0.0230	1.4400e-003	0.0244	0.0000	141.7425	141.7425	5.4600e-003	0.0000	141.8790

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3.4 Building Construction - 2021**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															
Off-Road	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3893	83.3893	0.0201	0.0000	83.8923
Total	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3893	83.3893	0.0201	0.0000	83.8923

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	0.0109	0.3746	0.0715	9.5000e-004	0.0224	1.0900e-003	0.0235	6.4600e-003	1.0500e-003	7.5100e-003	0.0000	89.9576	89.9576	3.9800e-003	0.0000	90.0570
Worker	0.0339	0.0218	0.2242	5.7000e-004	0.0622	4.2000e-004	0.0627	0.0165	3.9000e-004	0.0169	0.0000	51.7849	51.7849	1.4800e-003	0.0000	51.8219
Total	0.0447	0.3964	0.2957	1.5200e-003	0.0846	1.5100e-003	0.0861	0.0230	1.4400e-003	0.0244	0.0000	141.7425	141.7425	5.4600e-003	0.0000	141.8790

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3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1668	264.1668	0.0633	0.0000	265.7490
Total	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1668	264.1668	0.0633	0.0000	265.7490

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	0.0320	1.1263	0.2088	2.9700e-003	0.0708	3.0200e-003	0.0739	0.0205	2.8900e-003	0.0234	0.0000	282.3353	282.3353	0.0121	0.0000	282.6386
Worker	0.0991	0.0614	0.6441	1.7500e-003	0.1971	1.2800e-003	0.1983	0.0524	1.1800e-003	0.0536	0.0000	158.1714	158.1714	4.1700e-003	0.0000	158.2757
Total	0.1311	1.1878	0.8529	4.7200e-003	0.2679	4.3000e-003	0.2722	0.0729	4.0700e-003	0.0769	0.0000	440.5067	440.5067	0.0163	0.0000	440.9143

Carroll Commons - Tulare County, Annual

3.4 Building Construction - 2022**Mitigated Construction On-Site**

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
Category	tons/yr										MT/yr					
Off-Road	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1665	264.1665	0.0633	0.0000	265.7486
Total	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1665	264.1665	0.0633	0.0000	265.7486

Mitigated Construction Off-Site

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
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	0.0320	1.1263	0.2088	2.9700e-003	0.0708	3.0200e-003	0.0739	0.0205	2.8900e-003	0.0234	0.0000	282.3353	282.3353	0.0121	0.0000	282.6386
Worker	0.0991	0.0614	0.6441	1.7500e-003	0.1971	1.2800e-003	0.1983	0.0524	1.1800e-003	0.0536	0.0000	158.1714	158.1714	4.1700e-003	0.0000	158.2757
Total	0.1311	1.1878	0.8529	4.7200e-003	0.2679	4.3000e-003	0.2722	0.0729	4.0700e-003	0.0769	0.0000	440.5067	440.5067	0.0163	0.0000	440.9143

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3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0207	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

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	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597
Total	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597

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3.5 Paving - 2022

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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0207	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

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	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597
Total	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597

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3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	1.2300e-003	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5345
Total	1.0727	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5345

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.5000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507
Total	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.5000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507

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3.6 Architectural Coating - 2022

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	1.0715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	1.2300e-003	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5344
Total	1.0727	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5344

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.5000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507
Total	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.5000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507

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3.6 Architectural Coating - 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					
Archit. Coating	0.7143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	7.7000e-004	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228
Total	0.7151	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596
Total	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596

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3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	7.7000e-004	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228
Total	0.7151	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596
Total	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

Increase Density
 Increase Diversity
 Improve Walkability Design
 Improve Destination Accessibility
 Increase Transit Accessibility
 Improve Pedestrian Network
 Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.9841	2.4438	17.8331	0.0504	5.6535	0.0378	5.6913	1.5067	0.0349	1.5416	0.0000	4,568.601 ²	4,568.601 ²	0.1476	0.0000	4,572.291 ¹
Unmitigated	2.0424	2.6892	19.8560	0.0584	6.6122	0.0426	6.6648	1.7622	0.0393	1.8015	0.0000	5,297.629 ⁶	5,297.629 ⁶	0.1669	0.0000	5,301.801 ⁶

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	10,546.47	12,342.09	6234.03	17,860,787	15,270,973
Total	10,546.47	12,342.09	6,234.03	17,860,787	15,270,973

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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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.541226	0.031357	0.176167	0.121135	0.017229	0.004544	0.020399	0.079136	0.001813	0.001177	0.004121	0.001075	0.000622
Regional Shopping Center	0.649202	0.033214	0.206023	0.097171	0.000809	0.000809	0.003536	0.001309	0.001760	0.000965	0.003812	0.000947	0.000443

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated					0.0000	0.0000		0.0000	0.0000		0.0000	670.7549	670.7549	0.0277	5.7300e-003	673.1545
Electricity Unmitigated					0.0000	0.0000		0.0000	0.0000		0.0000	678.0735	678.0735	0.0280	5.7900e-003	680.4993
NaturalGas Mitigated	0.0143	0.1296	0.1088	7.8000e-004	9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003		0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647
NaturalGas Unmitigated	0.0143	0.1296	0.1088	7.8000e-004	9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003		0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	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
	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.64274e+006	0.0143	0.1296	0.1088	7.8000e-004	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003		0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647
Total		0.0143	0.1296	0.1088	7.8000e-004	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	0.0000	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647

Cartmill Commons - Tulare County, Annual

5.2 Energy by Land Use - NaturalGas**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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.64274e+006	0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647
Total		0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	115220	36.7116	1.5200e-003	3.1000e-004	36.8429
Regional Shopping Center	2.01293e+006	641.3619	0.0265	5.4800e-003	643.6564
Total		678.0735	0.0280	5.7900e-003	680.4993

Cartmill Commons - Tulare County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	115220	36.7116	1.5200e-003	3.1000e-004	36.8429
Regional Shopping Center	1.98996e+006	634.0433	0.0262	5.4200e-003	636.3116
Total		670.7549	0.0277	5.7300e-003	673.1545

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1654	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204
Unmitigated	1.1654	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204

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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	0.1786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9859					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204
Total	1.1654	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204

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	0.1786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9859					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204
Total	1.1654	9.0000e-005	9.8200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0204

7.0 Water Detail

 Cartrmill Commons - Tulare County, Annual

7.1 Mitigation Measures Water

	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Category	MT/yr			
Mitigated	49,8508	0.5980	0.0145	69,1069
Unmitigated	49,8508	0.5980	0.0145	69,1069

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	18,2952 / 11,2132	49,8508	0.5980	0.0145	69,1069
Total		49,8508	0.5980	0.0145	69,1069

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	18,2952 / 11,2132	49.8508	0.5980	0.0145	69.1069
Total		49.8508	0.5980	0.0145	69.1069

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

	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
	MT/yr			
Mitigated	52,6437	3.1112	0.0000	130.4225
Unmitigated	52,6437	3.1112	0.0000	130.4225

Cartmill Commons - Tulare County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	259.34	52.6437	3.1112	0.0000	130.4225
Total		52.6437	3.1112	0.0000	130.4225

Mitigated

	Waste Disposed	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	259.34	52.6437	3.1112	0.0000	130.4225
Total		52.6437	3.1112	0.0000	130.4225

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Cartrmill Commons - Tulare County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Cartmill Commons (2005 BAU) - Tulare County, Annual

Cartmill Commons (2005 BAU)
Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	823.00	Space	7.41	329,200.00	0
Regional Shopping Center	246.99	1000sqft	5.67	246,985.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	3			Operational Year	2005

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Cartmill Commons (2005 BAU) - Tulare County, Annual

Project Characteristics -

Land Use - Building Square footage calculated based on maximum Floor Area Ratio for Regional Commercial Land Use (City of Tulare General Plan).

914,760 sf total lot area x 0.27 max FAR = 246,985 max building sf

Parking spaces estimated using 1 space/300 sf

Construction Phase -

Mobile Land Use Mitigation - No traffic mitigation considered under 2005 BAU conditions

Area Mitigation -

Energy Mitigation - No energy mitigation considered under 2005 BAU conditions

Water Mitigation -

Fleet Mix - Project Specific Fleet Mix for Retail

Area Coating -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	246,990.00	246,985.00

2.0 Emissions Summary

Cartmill Commons (2005 BAU) - Tulare County, Annual

2.1 Overall Construction**Unmitigated Construction**

Year	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
tons/yr																
2021	0.1972	1.9235	1.4725	3.6400e-003	0.3081	0.0761	0.3842	0.1274	0.0707	0.1981	0.0000	326.1775	326.1775	0.0575	0.0000	327.6149
2022	1.4207	3.0887	2.8856	8.0700e-003	0.2711	0.1027	0.3738	0.0737	0.0966	0.1703	0.0000	728.8417	728.8417	0.0862	0.0000	730.9976
2023	0.7157	5.5900e-003	0.0113	2.0000e-005	1.3700e-003	2.9000e-004	1.6600e-003	3.6000e-004	2.9000e-004	6.6000e-004	0.0000	2.0803	2.0803	9.0000e-005	0.0000	2.0825
Maximum	1.4207	3.0887	2.8856	8.0700e-003	0.3081	0.1027	0.3842	0.1274	0.0966	0.1981	0.0000	728.8417	728.8417	0.0862	0.0000	730.9976

Mitigated Construction

Year	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
tons/yr																
2021	0.1972	1.9235	1.4725	3.6400e-003	0.3081	0.0761	0.3842	0.1274	0.0707	0.1981	0.0000	326.1773	326.1773	0.0575	0.0000	327.6147
2022	1.4207	3.0887	2.8856	8.0700e-003	0.2711	0.1027	0.3738	0.0737	0.0966	0.1703	0.0000	728.8413	728.8413	0.0862	0.0000	730.9972
2023	0.7157	5.5900e-003	0.0113	2.0000e-005	1.3700e-003	2.9000e-004	1.6600e-003	3.6000e-004	2.9000e-004	6.6000e-004	0.0000	2.0803	2.0803	9.0000e-005	0.0000	2.0825
Maximum	1.4207	3.0887	2.8856	8.0700e-003	0.3081	0.1027	0.3842	0.1274	0.0966	0.1981	0.0000	728.8413	728.8413	0.0862	0.0000	730.9972

Cartmill Commons (2005 BAU) - Tulare County, Annual

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Category	tons/yr										MT/yr					
Area	1.2806	1.5000e-004	0.0125	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0191	0.0191	9.0000e-005	0.0000	0.0213
Energy	0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	819.1001	819.1001	0.0307	8.3800e-003	822.3640
Mobile	16.7703	77.4314	160.2175	0.5285	6.7839	1.7402	8.5241	1.8281	1.6606	3.4887	0.0000	11,765.6781	11,765.6781	2.4208	0.0000	11,826.1976
Waste						0.0000	0.0000		0.0000	0.0000	52.6437	0.0000	52.6437	3.1112	0.0000	130.4225
Water						0.0000	0.0000		0.0000	0.0000	5.8042	44.0466	49.8508	0.5980	0.0145	69.1069
Total	18.0651	77.5611	160.3388	0.5293	6.7839	1.7501	8.5340	1.8281	1.6705	3.4986	56.4479	12,628.8439	12,687.2918	6.1607	0.0228	12,848.1123

Cartmill Commons (2005 BAU) - Tulare County, Annual

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	1.2806	1.5000e-004	0.0125	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0191	0.0191	9.0000e-005	0.0000	0.0213
Energy	0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	819.1001	819.1001	0.0307	8.3800e-003	822.3640
Mobile	16.7703	77.4314	160.2175	0.5285	6.7839	1.7402	8.5241	1.8281	1.6606	3.4887	0.0000	11,765.6781	11,765.6781	2.4208	0.0000	11,826.1976
Waste						0.0000	0.0000		0.0000	0.0000	52.6437	0.0000	52.6437	3.1112	0.0000	130.4225
Water						0.0000	0.0000		0.0000	0.0000	5.8042	44.0466	49.8508	0.5980	0.0145	69.1069
Total	18.0651	77.5611	160.3388	0.5293	6.7839	1.7501	8.5340	1.8281	1.6705	3.4986	56.4479	12,628.8439	12,687.2918	6.1607	0.0228	12,848.1123

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Cartmill Commons (2005 BAU) - Tulare County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	• Site Preparation	• Site Preparation	7/29/2021	8/11/2021	5	10	
2	• Grading	• Grading	8/12/2021	9/22/2021	5	30	
3	• Building Construction	• Building Construction	9/23/2021	11/16/2022	5	300	
4	• Paving	• Paving	11/17/2022	12/14/2022	5	20	
5	• Architectural Coating	• Architectural Coating	12/15/2022	1/11/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 7.41

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 370,478; Non-Residential Outdoor: 123,493; Striped Parking Area: 19,752 (Architectural Coating – sqft)

OffRoad Equipment

Cartmill Commons (2005 BAU) - Tulare County, Annual

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

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	217.00	94.00	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	43.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction**3.2 Site Preparation - 2021****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															
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530

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															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970
Total	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970

Cartmill Commons (2005 BAU) - Tulare County, Annual

3.2 Site Preparation - 2021**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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970
Total	3.9000e-004	2.5000e-004	2.5800e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5966	0.5966	2.0000e-005	0.0000	0.5970

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3.3 Grading - 2021**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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7425	81.7425	0.0264	0.0000	82.4034
Total	0.0629	0.6960	0.4632	9.3000e-004	0.1301	0.0298	0.1599	0.0540	0.0274	0.0814	0.0000	81.7425	81.7425	0.0264	0.0000	82.4034

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	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901
Total	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901

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3.3 Grading - 2021

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7424	81.7424	0.0264	0.0000	82.4033
Total	0.0629	0.6960	0.4632	9.3000e-004	0.1301	0.0298	0.1599	0.0540	0.0274	0.0814	0.0000	81.7424	81.7424	0.0264	0.0000	82.4033

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	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901
Total	1.3000e-003	8.4000e-004	8.6100e-003	2.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9887	1.9887	6.0000e-005	0.0000	1.9901

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3.4 Building Construction - 2021**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															
Off-Road	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3894	83.3894	0.0201	0.0000	83.8924
Total	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3894	83.3894	0.0201	0.0000	83.8924

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	0.0109	0.3746	0.0715	9.5000e-004	0.0224	1.0900e-003	0.0235	6.4600e-003	1.0500e-003	7.5100e-003	0.0000	89.9576	89.9576	3.9800e-003	0.0000	90.0570
Worker	0.0339	0.0218	0.2242	5.7000e-004	0.0622	4.2000e-004	0.0627	0.0165	3.9000e-004	0.0169	0.0000	51.7849	51.7849	1.4800e-003	0.0000	51.8219
Total	0.0447	0.3964	0.2957	1.5200e-003	0.0846	1.5100e-003	0.0861	0.0230	1.4400e-003	0.0244	0.0000	141.7425	141.7425	5.4600e-003	0.0000	141.8790

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3.4 Building Construction - 2021**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															
Off-Road	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3893	83.3893	0.0201	0.0000	83.8923
Total	0.0684	0.6276	0.5967	9.7000e-004		0.0345	0.0345		0.0325	0.0325	0.0000	83.3893	83.3893	0.0201	0.0000	83.8923

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	0.0109	0.3746	0.0715	9.5000e-004	0.0224	1.0900e-003	0.0235	6.4600e-003	1.0500e-003	7.5100e-003	0.0000	89.9576	89.9576	3.9800e-003	0.0000	90.0570
Worker	0.0339	0.0218	0.2242	5.7000e-004	0.0622	4.2000e-004	0.0627	0.0165	3.9000e-004	0.0169	0.0000	51.7849	51.7849	1.4800e-003	0.0000	51.8219
Total	0.0447	0.3964	0.2957	1.5200e-003	0.0846	1.5100e-003	0.0861	0.0230	1.4400e-003	0.0244	0.0000	141.7425	141.7425	5.4600e-003	0.0000	141.8790

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3.4 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
Category	tons/yr										MT/yr					
Off-Road	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1668	264.1668	0.0633	0.0000	265.7490
Total	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1668	264.1668	0.0633	0.0000	265.7490

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
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	0.0320	1.1263	0.2088	2.9700e-003	0.0708	3.0200e-003	0.0739	0.0205	2.8900e-003	0.0234	0.0000	282.3353	282.3353	0.0121	0.0000	282.6386
Worker	0.0991	0.0614	0.6441	1.7500e-003	0.1971	1.2800e-003	0.1983	0.0524	1.1800e-003	0.0536	0.0000	158.1714	158.1714	4.1700e-003	0.0000	158.2757
Total	0.1311	1.1878	0.8529	4.7200e-003	0.2679	4.3000e-003	0.2722	0.0729	4.0700e-003	0.0769	0.0000	440.5067	440.5067	0.0163	0.0000	440.9143

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3.4 Building Construction - 2022**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															
Off-Road	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1665	264.1665	0.0633	0.0000	265.7486
Total	0.1945	1.7802	1.8654	3.0700e-003		0.0922	0.0922		0.0868	0.0868	0.0000	264.1665	264.1665	0.0633	0.0000	265.7486

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	0.0320	1.1263	0.2088	2.9700e-003	0.0708	3.0200e-003	0.0739	0.0205	2.8900e-003	0.0234	0.0000	282.3353	282.3353	0.0121	0.0000	282.6386
Worker	0.0991	0.0614	0.6441	1.7500e-003	0.1971	1.2800e-003	0.1983	0.0524	1.1800e-003	0.0536	0.0000	158.1714	158.1714	4.1700e-003	0.0000	158.2757
Total	0.1311	1.1878	0.8529	4.7200e-003	0.2679	4.3000e-003	0.2722	0.0729	4.0700e-003	0.0769	0.0000	440.5067	440.5067	0.0163	0.0000	440.9143

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3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0207	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

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	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597
Total	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597

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3.5 Paving - 2022

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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0207	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

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	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597
Total	6.0000e-004	3.7000e-004	3.9100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9591	0.9591	3.0000e-005	0.0000	0.9597

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3.6 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	1.2300e-003	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5345
Total	1.0727	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5345

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507
Total	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507

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3.6 Architectural Coating - 2022

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	1.0715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	1.2300e-003	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5344
Total	1.0727	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5344

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.5000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507
Total	1.0300e-003	6.4000e-004	6.7200e-003	2.0000e-005	2.0600e-003	1.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.5000e-004	0.0000	1.6496	1.6496	4.0000e-005	0.0000	1.6507

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3.6 Architectural Coating - 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					
Archit. Coating	0.7143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	7.7000e-004	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228
Total	0.7151	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596
Total	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596

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3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	7.7000e-004	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228
Total	0.7151	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0228

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596
Total	6.4000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.0590	1.0590	3.0000e-005	0.0000	1.0596

4.0 Operational Detail - Mobile

Cartmill Commons (2005 BAU) - Tulare County, Annual

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated	16.7703	77.4314	160.2175	0.5285	6.7839	1.7402	8.5241	1.8281	1.6606	3.4887	0.0000	11,765.6781	11,765.6781	2.4208	0.0000	11,826.1976
Unmitigated	16.7703	77.4314	160.2175	0.5285	6.7839	1.7402	8.5241	1.8281	1.6606	3.4887	0.0000	11,765.6781	11,765.6781	2.4208	0.0000	11,826.1976

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	10,546.47	12,342.09	6234.03	17,860,787	17,860,787
Total	10,546.47	12,342.09	6,234.03	17,860,787	17,860,787

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.400578	0.072321	0.156798	0.206467	0.047356	0.007805	0.025221	0.073219	0.001514	0.001309	0.004110	0.001377	0.001925
Regional Shopping Center	0.400578	0.072321	0.156798	0.206467	0.047356	0.007805	0.025221	0.073219	0.001514	0.001309	0.004110	0.001377	0.001925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr											MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	678.0735	678.0735	0.0280	5.7900e-003	680.4993
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	678.0735	678.0735	0.0280	5.7900e-003	680.4993
NaturalGas Mitigated	0.0143	0.1296	0.1088	7.8000e-004	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647
NaturalGas Unmitigated	0.0143	0.1296	0.1088	7.8000e-004	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647

Cartmill Commons (2005 BAU) - Tulare County, Annual

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.64274e+006	0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647
Total		0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.64274e+006	0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647
Total		0.0143	0.1296	0.1088	7.8000e-004		9.8500e-003	9.8500e-003		9.8500e-003	9.8500e-003	0.0000	141.0266	141.0266	2.7000e-003	2.5900e-003	141.8647

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	115220	36.7116	1.5200e-003	3.1000e-004	36.8429
Regional Shopping Center	2.01293e+006	641.3619	0.0265	5.4800e-003	643.6564
Total		678.0735	0.0280	5.7900e-003	680.4993

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	115220	36.7116	1.5200e-003	3.1000e-004	36.8429
Regional Shopping Center	2.01293e+006	641.3619	0.0265	5.4800e-003	643.6564
Total		678.0735	0.0280	5.7900e-003	680.4993

6.0 Area Detail**6.1 Mitigation Measures Area**

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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	0.2931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9859					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6200e-003	1.5000e-004	0.0125	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0191	0.0191	9.0000e-005	0.0000	0.0213
Total	1.2806	1.5000e-004	0.0125	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0191	0.0191	9.0000e-005	0.0000	0.0213

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Category	MT/yr			
Mitigated	49,8508	0.5980	0.0145	69.1069
Unmitigated	49,8508	0.5980	0.0145	69.1069

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	18,2952 / 11,2132	49,8508	0.5980	0.0145	69.1069
Total		49,8508	0.5980	0.0145	69.1069

Cartmill Commons (2005 BAU) - Tulare County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	18,2952 / 11,2132	49.8508	0.5980	0.0145	69.1069
Total		49.8508	0.5980	0.0145	69.1069

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

	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
	MT/yr			
Mitigated	52,6437	3.1112	0.0000	130.4225
Unmitigated	52,6437	3.1112	0.0000	130.4225

Cartmill Commons (2005 BAU) - Tulare County, Annual

8.2 Waste by Land UseUnmitigated

	Waste Disposed	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	259.34	52.6437	3.1112	0.0000	130.4225
Total		52.6437	3.1112	0.0000	130.4225

Mitigated

	Waste Disposed	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	259.34	52.6437	3.1112	0.0000	130.4225
Total		52.6437	3.1112	0.0000	130.4225

9.0 Operational Offroad

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

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B

Biological Resources Assessment



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Biological Resource Assessment

Cartmill Avenue Development Project
Assessor Parcel Number 166-240-010-000
Tulare, CA



Prepared for



4CREEKS

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

Prepared by



1401 Fulton St, Suite 918
Fresno, CA 93721

March 4, 2021

1. Executive Summary

Cartmill Commercial is seeking to subdivide property from the City of Tulare and create parcels for development. As lead agency the City of Tulare has tasked 4Creeks, Inc. (4Creeks) with providing a Biological Resource Assessment (BRA) and Initial Study (IS) Write-Up per the California Environmental Quality Act prior to implementation of the proposed Project. As part of this biological assessment, 4Creeks, Inc. sought an environmental consulting firm to provide biological services. The proposed Project is approximately 22.25 acres, immediately east of Freeway 99, and immediately south of Cartmill Ave. The Project site is comprised of APN 166-240-010-000, located in the United States Geological Survey Tulare 7.5-minute quadrangle at an elevation of approximately 300 feet above mean sea level. Soar Environmental Consulting, Inc. prepared this Habitat Assessment Report for 4Creeks, Inc., in support of the California Environmental Quality Act requirements.

Prior to the preliminary habitat assessment, Soar Environmental Consulting, Inc. conducted research of the California Natural Diversity Database (CNDDDB), the United States Fish and Wildlife Service Information for Planning and Consultation (IPaC), and California Native Plant Society (CNPS) Manual of California Vegetation (CMV) to learn which species may potentially be present onsite. On January 8, 2021, Soar Environmental Consulting, Inc. performed an assessment of the Project site. The purpose of the pedestrian habitat assessment survey was to search for the presence of special-status species that have historically been observed within, or surrounding, the Project area.

Based on a review of CNDDDB, IPaC, and CMV database research indicated that a Habitat Assessment was necessary to search for the potential suitable habitat or presence for the 17 following species; San Joaquin kit fox (*Vulpes macrotis mutica*), Tipton kangaroo rat (*Dipodomys nitratoide nitratoide*), blunt-nosed leopard lizard (*Gambelia silus*), giant garter snake (*Thamnophis gigas*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), delta smelt (*Hypomesus transpacificus*), vernal pool fairy shrimp (*Branchinecta lynchi*), crotch bumble bee (*Bombus crotchii*) Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). Nesting birds, long-billed curlew (*Numenius americanus*) marbled godwit (*Limosa fedoa*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), and whimbrel (*Numenius phaeopus*). Potential flowering plants present include California jewelflower (*Caulanthus californicus*), and San Joaquin adobe sunburst (*Pseudobahia peirsonii*).

Although none of the listed species were observed during the Biological Assessment of the Project Footprint, potentially suitable habitat features exist for the following species: Tipton kangaroo rat (*Dipodomys nitratoide nitratoide*), blunt-nosed leopard lizard (*Gambelia silus*), California tiger Salamander (*Ambystoma californiense*). Nesting birds, long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), tricolored blackbird (*Agelaius tricolor*). Flowering plants, San Joaquin adobe sunburst (*Pseudobahia peirsonii*).

Soar Environmental Consulting, Inc. recommends that a biologist assess the following features prior to the commencement of ground disturbance activities:

- Water features; irrigation canal immediately adjacent to the southern and eastern Project boundaries, and stormwater infiltration basin immediately adjacent to the southern boundary of the Project site for California tiger Salamander.



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- Although small burrows were all collapsed at the time of the Habitat Assessment, it is recommended that any open small mammal burrows be assessed by a qualified biologist for blunt-nosed leopard lizard, California tiger Salamander, and Tipton kangaroo rat.
- Switchgrass thickets in the middle of the Project site be assessed for nesting birds, and ground nests that might be present in the agricultural field.

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2. Introduction

4Creeks, Inc. (4Creeks) has tasked Soar Environmental Consulting with providing a Biological Resource Assessment (BRA) and Initial Study (IS) Write-Up in accordance with the California Environmental Quality Act (CEQA) within the City of Tulare, California. As part of this Biological Resource Assessment, 4Creeks seeks an environmental consulting firm to provide biological services. The proposed project is comprised of vacant Tulare County Assessor's Parcel Number (APN) 166-240-010-000, and is located in Township 19s, Range 24e, Section 35, of the United States Geological Survey (USGS) Tulare 7.5-minute quadrangle map. The 22.25-acre proposed Project footprint (Project) is immediately east of State Route (SR) 99 and south of Cartmill Avenue at an elevation of approximately 300 feet above mean sea level (AMSL). Soar Environmental Consulting, Inc. (Soar Environmental) prepared this Habitat Assessment Report for 4Creeks, in support of the CEQA requirements.

Prior to field activities, Soar Environmental researched 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) Manual of California Vegetation (CMV) to learn which species may potentially be present onsite. Soar Environmental researched specific species and habitat requirements for the species noted in the CNDDB, IPaC and CNPS databases and included proximal species observations and species status in this report.

As Soar biologist Travis Albert conducted a pedestrian habitat assessment in the Project on January 8, 2021. The Project footprint is a vacant agricultural field, with no trees, mostly bare earth, and ruderal and perennial grasses sparsely spread throughout. Around the edges of the Project footprint there is scattered Russian thistle (*Kali targus*), a non-native tumble weed, and in the approximate center of the Project there are thickets of switchgrass (*Panicum virgatum*) and Johnson grass (*Sorghum halepense*). The ground is highly disturbed from agricultural equipment with little to no vegetation. The northern boundary of the Project site is bordered by East Cartmill Avenue. There is an irrigation ditch along the eastern boundary of the project site (**Figure 23**) just outside the Project Footprint and a stormwater infiltration basin just outside the southern boundary (**Figures 24 and 25**). There are no trees or powerline poles within the Project footprint, however there is an underground AT&T line along the eastern boundary (**Figures 27 - 29**). SR 99 and a chain-link fence parallel the western boundary.

Figure 1 – Project Location

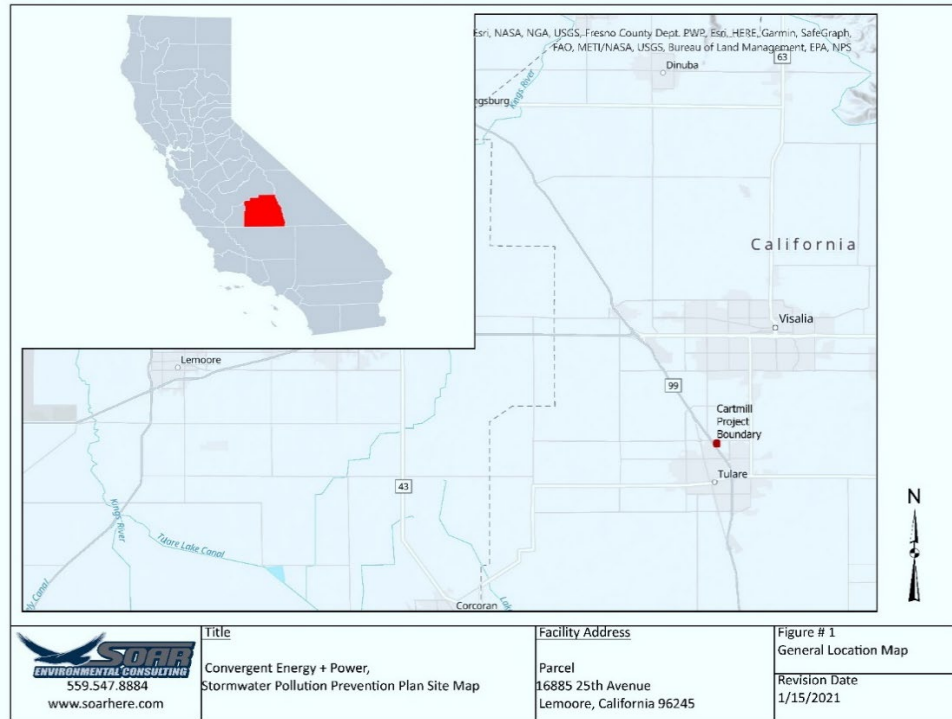


Figure 2 – Project Site Boundary

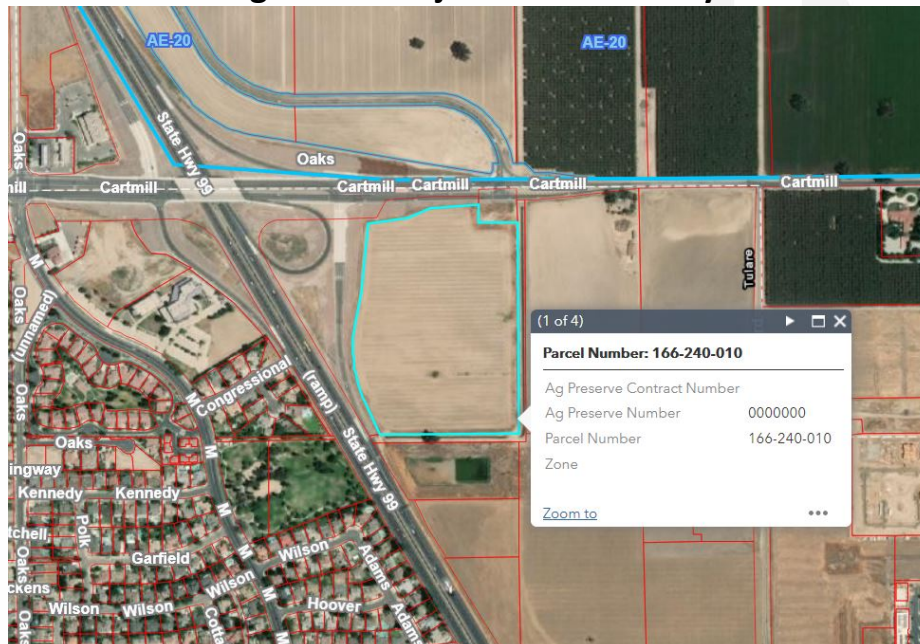


Figure 3 – Habitat Assessment Survey Route



3. Methods

3.1 Literature Review

Prior to performing the habitat assessment, Soar Environmental conducted a review of the California Natural Diversity Database (CNDDDB) and the California Native Plant Society (CNPS) Online Rare Plant Inventory for the *Cairns Corner*, *Exeter*, *Goshen*, *Paige*, *Taylor Weir*, *Tipton*, *Tulare*, *Visalia*, and *Woodville* 7.5-minute USGS quadrangles and the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC).

The CNDDB search indicated that the Federal and/or State-listed special-status wildlife species most likely to occur within or near the Project site are the blunt-nosed leopard lizard (*Gambelia silus*), California Jewelflower (*Caulanthus californicus*), Crotch bumble bee (*Bombus crotchii*), San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*), San Joaquin kit fox (*Pseudobahia peirsonii*), Swainson's hawk (*Buteo swainsoni*), (*Vulpes macrotis mutica*), Tipton kangaroo rat (*Dipodomys nitratoideus nitratoideus*), tricolored blackbird (*Agelaius tricolor*), elderberry longhorn beetle (*Desmocerus californicus dimorphus*), vernal pool fairy shrimp (*Branchinecta lynchi*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

The IPaC search revealed Federally listed sensitive species likely to occur within or near the Project site include San Joaquin kit fox (*Vulpes macrotis mutica*), Tipton kangaroo rat (*Dipodomys nitratoideus nitratoideus*), blunt-nosed leopard lizard (*Gambelia silus*), giant garter snake (*Thamnophis gigas*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), delta smelt (*Hypomesus transpacificus*), and vernal pool fairy shrimp (*Branchinecta lynchi*). Migratory birds include Long-billed Curlew (*Numenius americanus*), Marbled Godwit (*Limosa fedoa*), Whimbrel (*Numenius phaeopus*), Swainson's hawk (*Buteo swainsoni*), and tricolored blackbird (*Agelaius tricolor*).

A search of the California Native Plant Society (CNPS) Manual of California Vegetation (CMV) showed San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*), California Jewelflower (*Caulanthus californicus*) as the only special status plant species likely to occur within nine 7.5-minute quadrangles around the Project site.

3.2 Field Reconnaissance Methodology

On January 8, 2021, Soar Environmental biologist Travis Albert began the pedestrian habitat assessment from the northeast corner of the Project boundary, walking the entire perimeter, noting environmentally sensitive habitat features and evidence of occupancy for the mentioned species. After walking the perimeter of the Project boundary, Mr. Albert walked three transects through the 22.25-acre agricultural field encompassing the Project Footprint, examining possible small mammal dens, identifying vegetation, and looking for signs of wildlife occupancy. Mr. Albert collected photos of the Project boundaries (**Figures 4 - 12**), and from the center of the Project footprint in each cardinal direction depicting the habitat (**Figures 13 - 17**). No special status species were observed.

Around the edges of the parcel there Mr. Albert observed scattered invasive weeds, and ruderal, and perennial grasses. An irrigation ditch is present along the eastern boundary of the project footprint (**Figure 23**), approximately 20 feet east of the boundary itself, and a stormwater infiltration basin lays just outside the southern boundary (**Figure 24 and 25**). One old powerline pole stands in the middle of the Project area (**Figures 19**), is not connected to any powerlines, and there are no other powerline poles or trees present within the Project boundary. However, there is an underground AT&T line along the eastern boundary (**Figures 28 - 30**) that appears to trend along the property line. SR 99 and a chain-link fence parallel the western boundary. East Cartmill Avenue and a sidewalk border the Northern Project boundary, with a three-way intersection and traffic light proximate to the northeast corner of the boundary (**Figure 4**). To the south and east there are mostly vacant agricultural fields, and active agricultural fields to the northeast, of Cartmill Avenue. During the biological assessment, the biologist did not observe any additional native shrub species, native plant communities, or active nests within, or immediately surrounding the Footprint.

This Biological Assessment required wildlife and botanical analysis for a general evaluation of the character and quality of habitat. A list of potentially occurring species was generated from CNDDDB, IPaC, and CMV databases (**Table 1**).

Project Boundary Photos

Figure 4 – Northern Site Boundary (View South from Cartmill Ave)



Figure 5 – Traffic Light Adjacent to the Northeast Corner of the Project Site



Figure 6 – Eastern Site Boundary (View Southwest)



Figure 7 – Eastern Site Boundary (View North)



Figure 8 – Southwestern Corner (View West)



Figure 9 – Southern Site Boundary (View East)

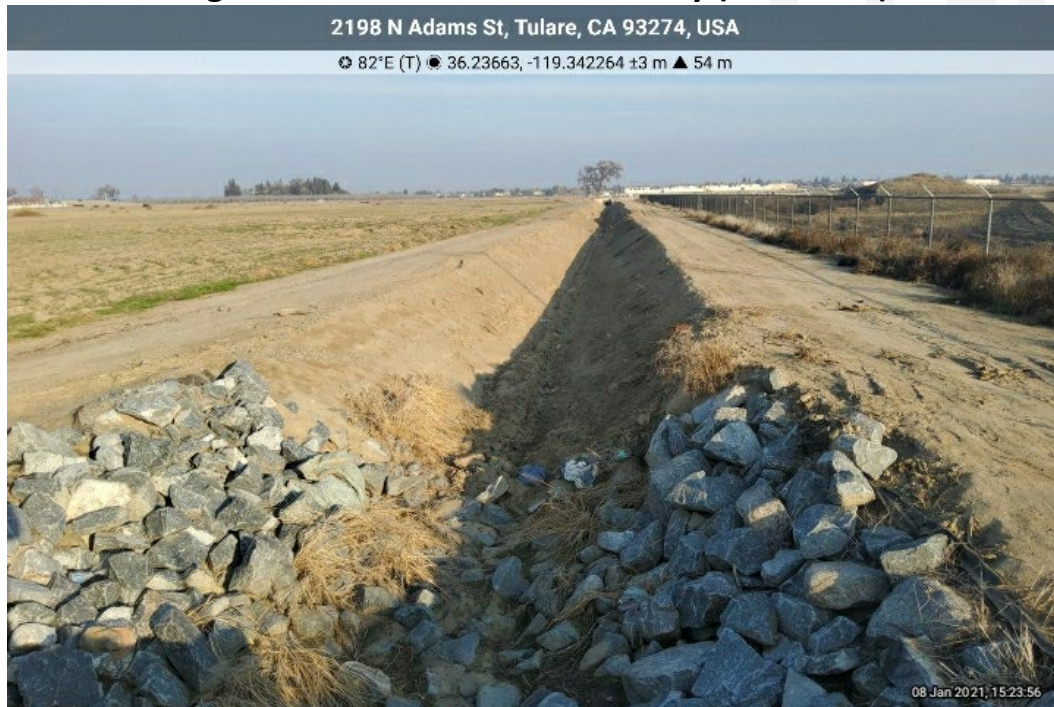


Figure 10 – Southwest Corner (View Northeast)

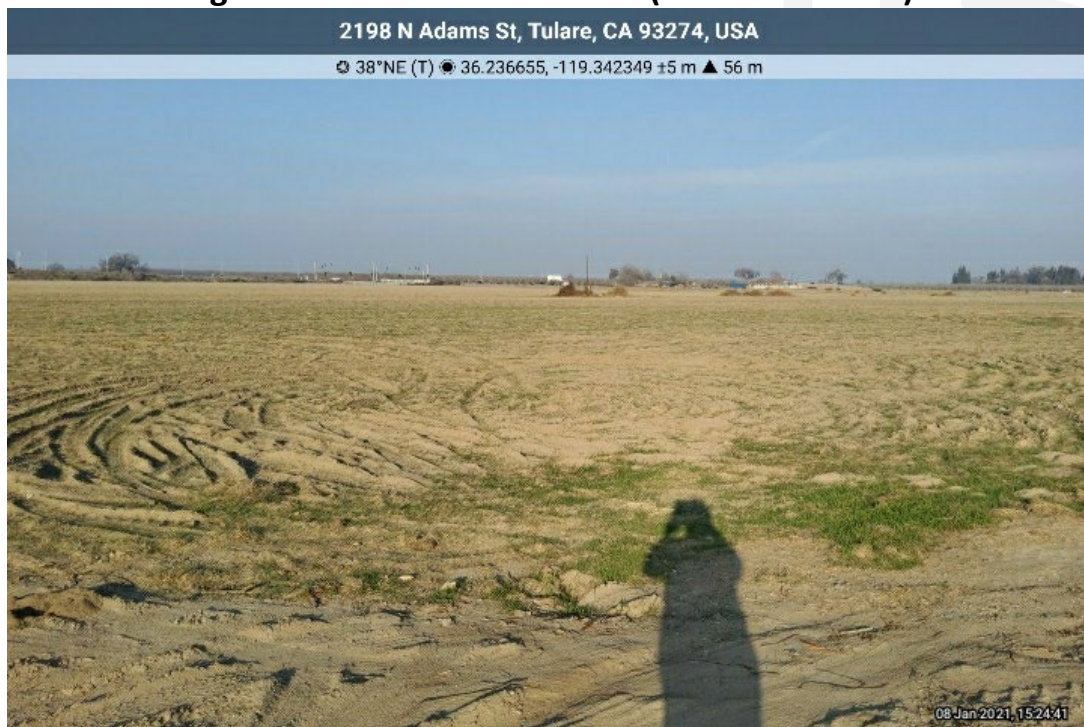


Figure 11 – Southwest Corner (View Southeast)

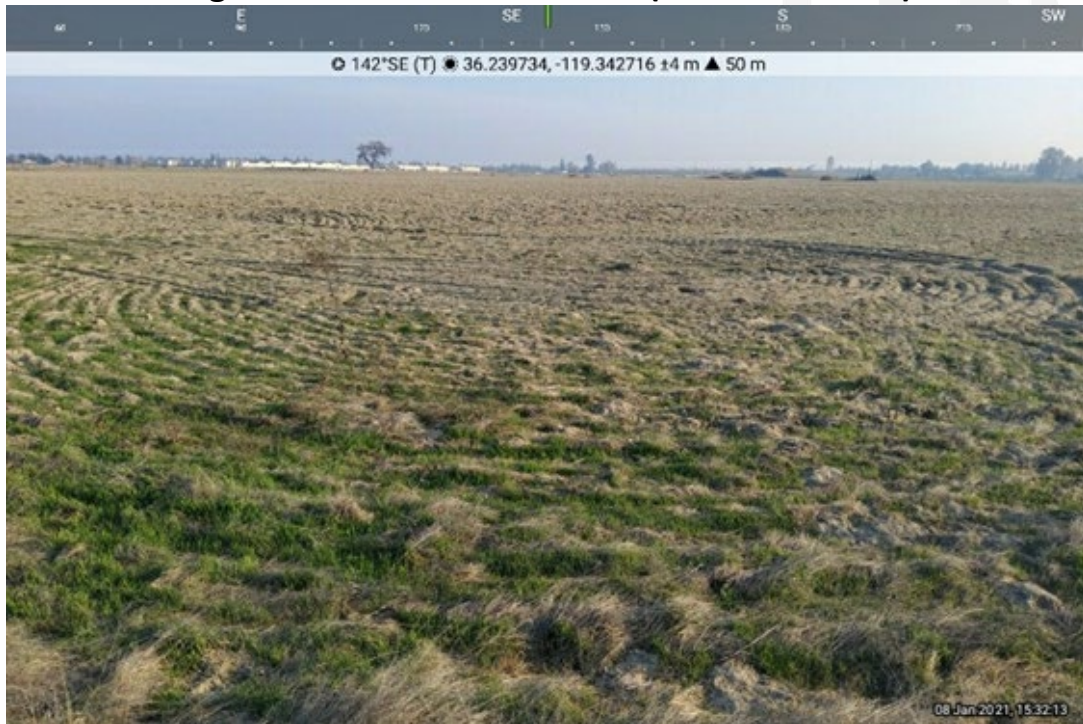
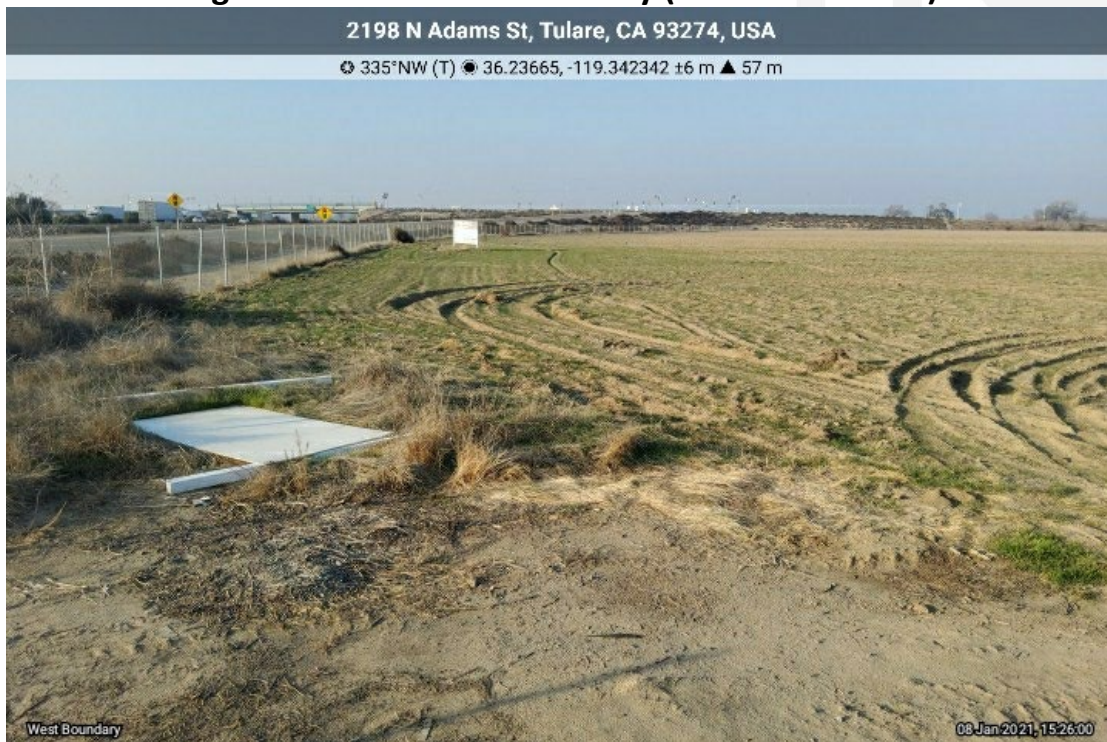


Figure 12 – Western Boundary (View Northwest)



Cardinal Direction Photos from Center of The Project Site

Figure 13 – North

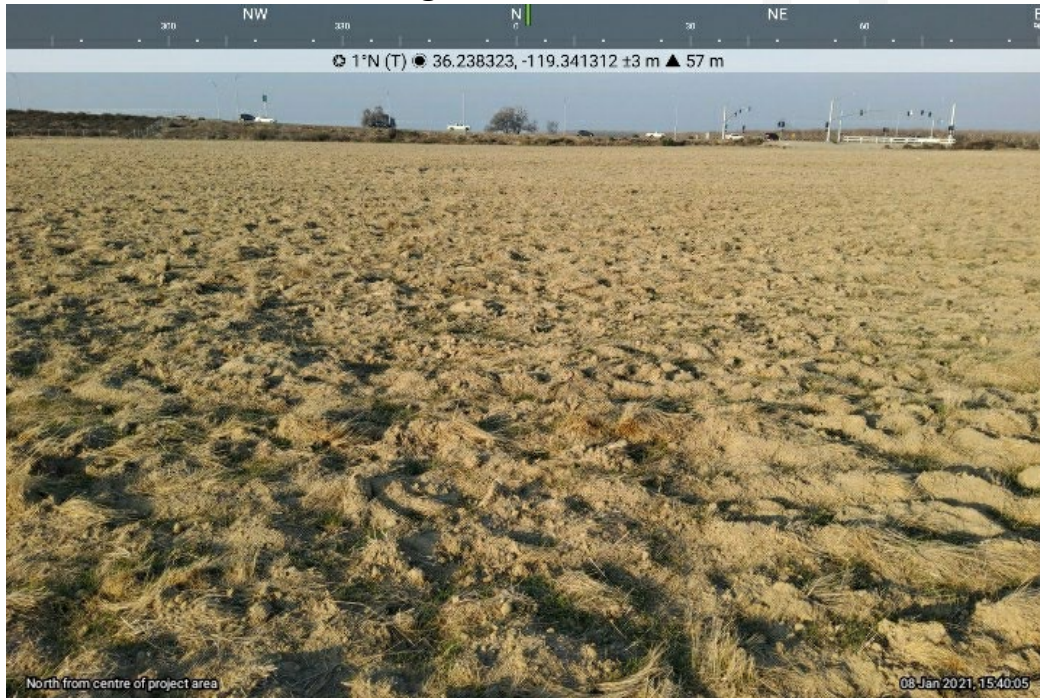


Figure 14 – East

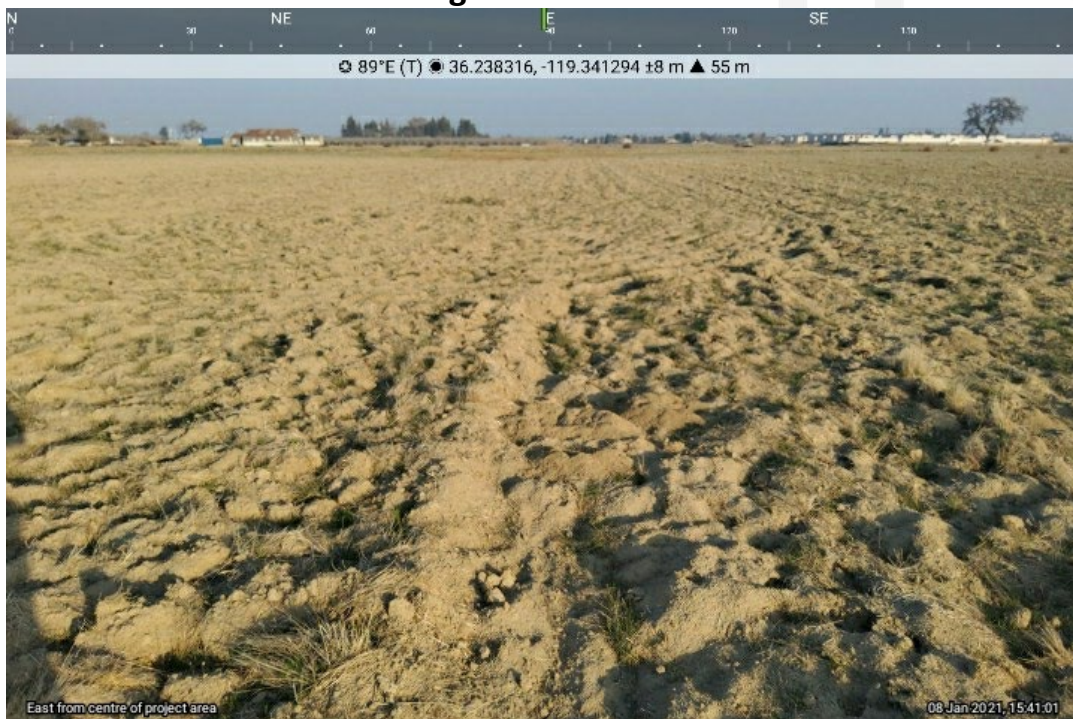


Figure 15 – South

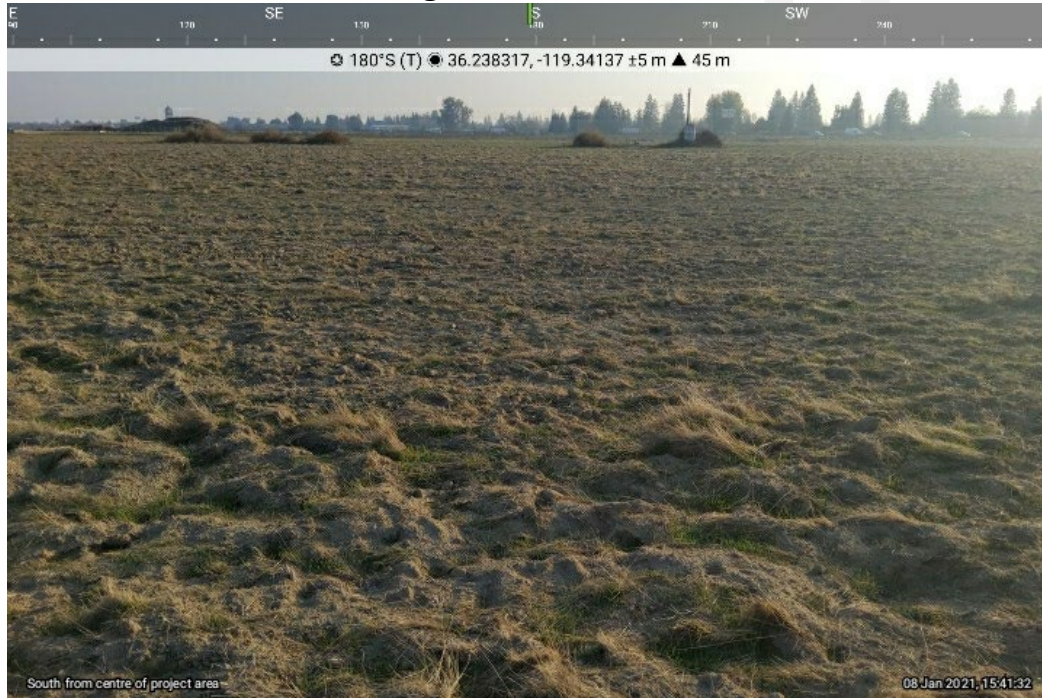
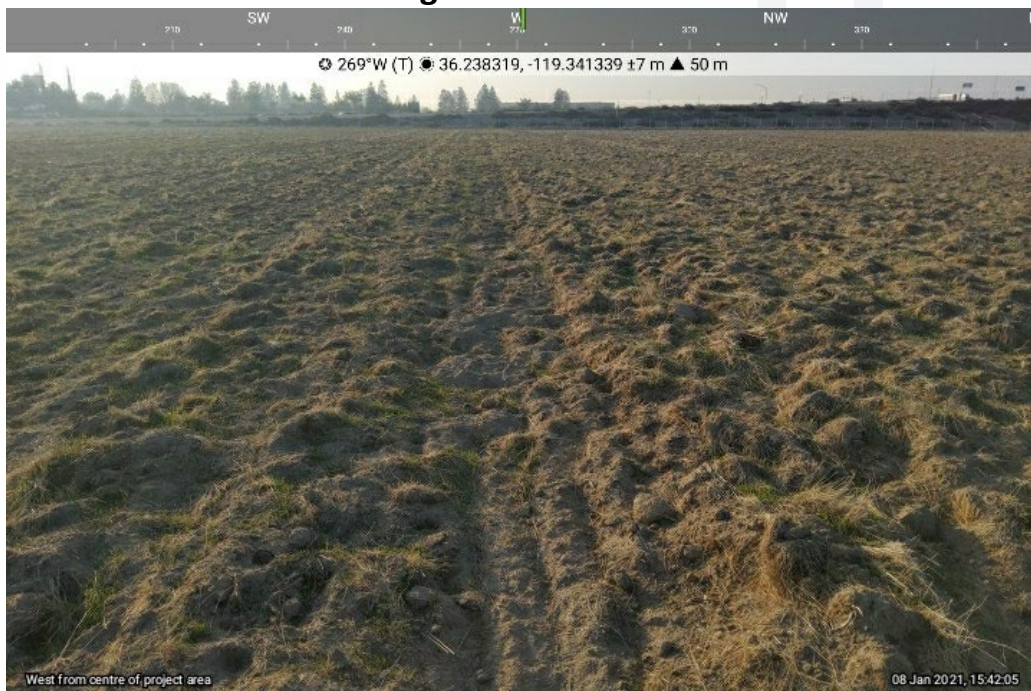


Figure 16 – West



4. Field Reconnaissance Results

During the field reconnaissance, there were no observations of special-status species. The Project footprint consists of an open field, highly disturbed from agricultural equipment, with tilling marks visible in the soil. The Project site is likely to have had pesticide usage on the property.

Around the edges of the parcel there is scattered Russian thistle (*Kali targus*), a non-native tumble weed, with Ripgut brome (*Bromus diandrus*), and other ruderal or perennial grasses sparsely spread throughout the field. In the approximate center of the Project site there are thickets of switchgrass (*Panicum virgatum*) and Johnson grass (*Sorghum halepense*) that may provide limited hide and cover for wildlife species, or potential ground-nesting bird habitat. However, the ground was highly disturbed from agricultural equipment with little to no grass present at the time of this Habitat Assessment. The area around the Project site is mostly agricultural and urban development. No special status plant species were observed within the Project; however, the assessment did not take place during the typical blooming season (i.e., spring).

No special status wildlife species were observed during the site visit. However the Soar biologist did observe a flock of chipping sparrows (**page 27**) foraging in the field and taking cover in the thickets of switchgrass at **36.237502, -119.341409** depicted in (**Figure 18**). The chipping sparrow is a common passerine species that did not appear in the records search of CNDDB or IPaC databases. Breeding habitat for this species is usually more montane or woodland habitat. the biologist observed a few ground squirrel mounds (**Figure 22**). However, the biologist made no observations of burrows that could be used by blunt-nose leopard lizard (BNLL), giant garter snake (GGS), San Joaquin kit fox (SJKF), or Tipton kangaroo rat (TKR). There were many small divots in the ground that appeared to be small mammal burrows, perhaps collapsed by heavy agricultural equipment. All burrows or divots observed had openings that were 3 inches in diameter or less, and less than 3 inches deep, precluding them from being used as dens or burrows.

Table 1– Species Observed on the Project Site

Wildlife Species Observed	Listing Status
Chipping sparrow (<i>Spizella passerina</i>)	MTBA
Plant Species Observed	
Johnson grass (<i>Sorghum halepense</i>)	None
Ripgut brome (<i>Bromus diandrus</i>)	None
Russian thistle (<i>Kali targus</i>)	None
Switchgrass (<i>Panicum virgatum</i>)	None

4.1 Special-Status Species

Special-status species are plant and animal species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. 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).
- CDFW 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 CNDDDB occurrence records of species, review of the USFWS lists for special-status species occurring in the region, and CNPS literature (**Table 1**).

- **Present:** Species known to occur on the site, based on CNDDDB records, and/or was observed on the site during the field survey.
- **High:** Species known to occur on or near the site (based on CNDDDB 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 Species Potentially Occurring on Site or in the Vicinity

Common/ Scientific Name	Listing Status*	Habitat Requirements	Potential for Occurrence
Mammals			
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, SE	Desert scrub, chaparral, and grasslands. Also occurring in agricultural areas and urban environments.	None: Species is not known to occur in the vicinity of the site and there is no suitable habitat.
Tipton Kangaroo Rat (<i>Dipodomys nitratoideus nitratoideus</i>)	FE, SE	Arid and alkaline plains under shrub and grass vegetation, coastal scrub, open stages of chaparral, and desert scrub habitats, and in conifer woodlands.	Low; Habitat is marginal. The last known occurrence was 10 miles away in 1945.
Reptiles			
Blunt-nose leopard lizard (<i>Gambelia silus</i>)	FE, SE	Semi-arid grasslands, alkali flats, and washes, utilize shrubs and small mammal burrows.	Low; Habitat is marginal. The last known occurrence was 17 miles away in 1974.
Giant Garter Snake (<i>Thamnophis gigas</i>)	FT	Marshes, sloughs, drainage canals, irrigation ditches, and prefers locations with vegetation close to water for basking.	None; Species is not known to occur in the vicinity of the site.
Amphibians			
California Red-legged Frog (<i>Rana draytonii</i>)	FT, SSC	Standing waters and freshwater marshes, wetland. Forest, scrub, and woodland riparian areas. Requires a breeding pond, slow-flowing stream. Will use small mammal burrows.	Low; Species is not known to occur in the vicinity of the site; however, habitat is marginal.
California Tiger Salamander (<i>Ambystoma californiense</i>)	FT, ST	Grasslands, oak savannah riparian woodlands and lower elevations of coniferous forests, ditches and wetlands.	Low; Species is not known to occur in the vicinity of the site; however, habitat is marginal.
Fishes			
Delta Smelt (<i>Hypomesus transpacificus</i>)	FT	Shallow, fresh, or slightly brackish backwater sloughs and edgewaters, with good water quality and substrate for spawning.	None; Species is not known to occur in the vicinity of the site and there is no habitat for this species onsite.
Invertebrates			
Crotch bumble bee (<i>Bombus crotchii</i>)	FT, SC	Grasslands and shrublands, with food sources; milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheats.	None; There were no habitat features for this species onsite. The last known occurrence was 7 miles away in 1961.

Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	FT	Found in the presence of red or blue elderberry.	None; there are no suitable habitat features for this species onsite.
Vernal Pool Fairy Shrimp (<i>Branchinecta lynchi</i>)	FT	Vernal pool habitats.	None; there are no suitable habitat features for this species onsite.
Birds			
Chipping sparrow (<i>Spizella passerina</i>)	MTBA	Open woodland, forests with shrubby undergrowth, and early successional forests. Also common in suburban areas, urban parks, orchards, and other human-modified landscapes.	Present; observed during biological assessment.
Long-billed curlew (<i>Numenius americanus</i>)	BCC	Sparse, short grasses, including shortgrass and mixed-grass prairies as well as agricultural fields.	Low; Agricultural fields provide potential habitat. However, habitat quality is low.
Marbled godwit (<i>Limosa fedoa</i>)	BCC	Shortgrass prairies near wetlands.	Low; Agricultural fields provide potential habitat. However, habitat quality is low.
Swainson's hawk (<i>Agelaius tricolor</i>)	ST	Nests in isolated trees or riparian woodlands adjacent to suitable foraging habitat (agricultural fields, grasslands, etc.).	Low; There is no nesting habitat for this species within the project footprint however foraging habit is present around the Project site.
Tricolored blackbird (<i>Agelaius tricolor</i>)	ST, MBTA	Found in areas near water, such as marshes, grasslands, and wetlands. They require some sort of substrate nearby to build nests.	Low; Potential habitat might be present in the surrounding area, but not in the immediate Project footprint.
Whimbrel (<i>Numenius phaeopus</i>)	BCC	Plains, dry grassland, farmland, ranch country. Breeds most commonly in prairie regions with scattered groves of trees	Low; Agricultural fields provide potential habitat. However, habitat quality is low.
Plants			
California Jewelflower (<i>Caulanthus californicus</i>)	1B.1, FE, SE,	Cismontane woodland, Valley, and foothill grassland.	None; Potential habitat was not observed in Project footprint.
San Joaquin Adobe Sunburst (<i>Pseudobahia peirsonii</i>)	1B.1, FT, SE,	Chenopod scrub Pinyon and juniper woodland Valley, and foothill grassland.	None; Potential habitat was not observed in Project footprint.

*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
- 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

5. Species Description

5.1 Mammals

5.1.1 San Joaquin kit fox (*Vulpes macrotis mutica*)

The San Joaquin kit fox (SJKF) is listed as Threatened at the Federal level and Endangered at the State level. SJKF are petite, light-colored canids, approximately 50 centimeters (20 inches) in length, with bushy, black-tipped tails, large ears, and pointed snouts.

SJKF is a desert-adapted species which occurs mainly in arid, flat grasslands, scrublands, and alkali meadows where the vegetation structure is relatively short. This species uses dens year-round and needs loose-textured soils suitable for burrowing. They primarily prey on kangaroo rats and other small rodents, as well as large insects and occasionally rabbits. SJKF have adapted to human habitation and can also be found in more developed areas such as golf courses, airports, and residential areas.

During the field survey, there were no signs of SJKF occupancy within the Project footprint or surrounding areas. There appeared to be small mammal burrows scattered around the project site, however all burrows observed by the Soar Biologist were completely collapsed, and/or, too small for SJKF dens. The openings measure 1 to 3 inches and approximately 3 to 4 inches deep, on average. Potential suitable habitat SJKF is poor due to the level of ground disturbance and urbanization around the Project site. The closest and most recent occurrence of SJKF in a 9-quadrangle search of CNDDDB records is in the Goshen 7.5-minute quadrangle is approximately 9.1 miles northwest of the Project site in 1975.

5.1.2 Tipton kangaroo rat (*Dipodomys nitratoide*)

Tipton kangaroo rat (TKR) is listed as Endangered at both the Federal and State level. TKR have light brown bodies averaging 10-11 centimeters (4 inches) in length, long rear legs, short front legs adapted for digging, long tufted tails averaging 12.5-13 centimeters (~5 inches) long, and large black eyes.

TKR inhabit saltbush scrub, sink scrub, and grassland habitats, from the floor of the San Joaquin Valley up to 300 feet in elevation, from north of Visalia, to south of Bakersfield, California. TKR are fossorial mammals whose burrows are typically less than three inches in diameter and are usually found at the base of shrubs.

During the field survey, no signs of TKR were observed in the Project footprint or surrounding areas. All small mammal burrows observed within the project site were all collapsed from heavy ground disturbance of agricultural equipment on the date of the site visit. None of the burrows measured by the Soar Biologist were more than 3 inches deep, and there are very few shrubs for hide and cover. Habitat quality for TKR is poor and this species is unlikely to occur within the Project footprint. The closest and most recent occurrence of TKR in a 9-quadrangle search of CNDDDB records is in the Cairns Corner 7.5-minute quadrangle is approximately 10.4 miles southeast of the Project site in 1945.

5.2 Reptiles

5.2.1 Blunt-nosed leopard lizard (*Gambelia silus*)

Blunt-nosed leopard lizard (BNLL) is listed as Endangered on the Federal and the State level. BNLL have a light background with dark gray-brown spotting, giving it. The body length of the BNLL ranges from 7 to 12 centimeters (3 to 5 inches), with a tail typically longer than the body. BNLL are found in the southern San Joaquin Valley and surrounding foothills and valleys.

BNLL prefer flat areas with open space for running, including semi-arid grasslands, alkali flats, and washes, utilize shrubs and small mammal burrows for cover and shelter, and typically avoid densely vegetated areas. Distribution has been extensively reduced by conversion of habitat to cropland.

During the field survey, no signs of BNLL were observed within the Project footprint. Small mammal burrows within or around the project site have been collapsed from heavy ground disturbance of agricultural equipment. None of the burrows measured by the Soar Biologist were more than 3 inches deep. The closest and most recent occurrence of BNLL in a 9-quadrangle search of CNDDDB records is approximately 17.0 miles southwest of the Project site in 1974.

5.2.2 Giant garter snake (*Thamnophis gigas*)

Giant garter snake (GGS) is listed as Threatened on the Federal level. GGS are at least 162 centimeters (64 inches) long, with a brownish olive background, a yellow stripe down the center of the back, and a light-colored stripe on either side. GGS historically ranged from Kern County to Butte County, but due to habitat degradation, this species is thought to no longer occur south of Fresno County.

GGs are found primarily in marshes, sloughs, drainage canals, irrigation ditches, and prefer locations with vegetation close to water for basking. GGs use small mammal burrows and vegetation piles for cover during hotter weather.

No signs of GGs were observed within the Project footprint or surrounding areas. Habitat quality for this species is poor. There is a high level of ground disturbance and very little vegetation at the time of this assessment. For these reasons combined with surrounding urbanization, the potential for occurrence of this species is very low. CNDDDB records do not contain any observations of GGs in Tulare County.

5.3 Amphibians

5.3.1 California red-legged frog (*Rana draytonii*)

California red-legged frog (CRLF) is listed as Threatened on the Federal level and is considered a Species of Special Concern in California. CRLF are medium-sized frogs from 4.4-13.3 centimeters (1.75 to 5.5 inches) long, with a slim waist, long legs, reddish brown, gray, or olive color with black flecks, dark mask on the head, and red on hind legs and lower belly.

In the San Joaquin Valley, CRLF are not thought to occur south of Fresno County. CRLF are commonly found in lowlands and foothills, primarily near ponds in humid forests, woodlands, grasslands, and coastal scrub, and prefer streamside locations with vegetative cover.

No signs of CRLF were observed within the Project footprint or surrounding areas. The irrigation canal was dry at the time of this assessment, and habitat quality for this species is poor. Although the irrigation drainage along the eastern boundary and stormwater infiltration basin along the southern boundary could provide low quality dispersal habitat, CNDDDB records do not contain any observations of CRLF in Tulare County.

5.3.2 California tiger salamander (*Ambystoma californiense*)

California tiger salamander (CTS) is listed as Threatened on the Federal and State level. Adult CTS range in size from 15-22 centimeters (6 to 9 inches) long and have a dark background color with distinctive yellow spots. Juvenile CTS look much like adults but lack the yellow spots. Larval CTS are grayish green in color and have the appearance of tadpoles with obvious, external gills. CTS eggs are clear and are typically laid singly or in groups of three or four in shallow ponds.

Endemic to California CTS is found in grasslands, oak savannah woodlands, edges of mixed woodland, lower elevations of coniferous forests, and in heavily grazed fields along the Central California Coast and within the Central San Joaquin Valley. They may breed in ditches where water is present for a long enough duration for eggs and larvae to metamorphose into adults. During the non-breeding season (approximately late May through early November), CTS live in small mammal burrows, typically those of ground squirrels and pocket gophers.

No signs of CTS were observed within the Project footprint or surrounding areas. The irrigation canal was dry at the time of this assessment, and habitat quality for this species is poor. However, ground squirrel burrows present onsite may be utilized by CTS and the stormwater infiltration basin directly south of the

Project boundary may provide low quality dispersal habitat. CNDDDB records do not contain any records of CTS within the 9-quadrangle search around Project site.

5.4 Fish

5.4.1 Delta smelt (*Hypomesus transpacificus*)

Delta smelt (DS) is listed as Threatened on the Federal level and Endangered on the State level. DS are 60-70 millimeters (2-3 inches) long, slim bodied fish with a silver sheen. DS prefer shallow, fresh, or slightly brackish backwater sloughs and edgewaters with good water quality and substrate for spawning and are generally found in brackish waters below 25 degrees Celsius. The range of DS is restricted to the upper reaches of the San Francisco Bay and Sacramento-San Joaquin Delta Estuary.

The habitat on the Project site is not suitable for delta smelt as there is no waterway connecting this site to the Sacramento-San Joaquin Delta Estuary. According to CNDDDB no record of DS observation has been recorded anywhere in Tulare County. Because of these reasons, no adverse impacts to DS are anticipated to occur during proposed construction activities.

5.5 Invertebrates

5.5.1 Crotch bumble bee (*Bombus crotchii*)

The Crotch bumblebee (CRBB) can be distinguished by its square-shaped face and rounded ankle on the midleg. Queens and workers (females) have a black head and face and display black color on their mid and bottom thorax and between their wing bases. The appearance of drones (males) varies slightly from queens and workers; drones display yellow hair on their faces, and a black stripe mid thorax. The front of the drone abdomen should have a yellow coloring, and the rest of their abdomen is expected to be predominantly black and red. Workers are active from April to August and queen bees are active for only two months from March until May.

Crotch's bumblebee inhabits grasslands and shrublands and requires a hotter and drier environment than other bumblebee species. It is characterized as a short-tongued species and therefore prefers certain plant species as a food source including milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheat.

During the field survey, no signs of CRBB were observed within the Project footprint. Associated plant species were not present within the Project footprint. According to CNDDDB records the most recent occurrence of CRBB is in is approximately 7 miles northeast of the Project site in 1961.

5.5.2 Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)

The valley elderberry longhorn beetle is listed as Threatened at the Federal level. VELB is found in the presence of red or blue elderberry in the San Joaquin Valley of California, often preferring larger (2-8 -nch thick stem), stressed elderberry plants (CNDDDB). Breeding typically occurs between March and June when adults are most active.

During the field survey, no signs of VELB were observed and there are no suitable habitat characteristics for this species.

The habitat on the Project site is unsuitable for Valley elderberry longhorn beetle as there are no host plant, red or blue valley elderberry present within the Project footprint. CNDDDB records indicate the nearest and most recent observation of VELB to the Project area was in the Exeter 7.5-minute quadrangle, 14.6 miles northeast, in 1991.

5.5.3 Vernal pool fairy shrimp (*Branchinecta lynchi*)

Vernal pool fairy shrimp (VPFS) is listed as Threatened on the Federal level and has no listing on the State level. VPFS are 2.5 centimeters (one inch) long, translucent crustaceans with 11 pairs of appendages.

VPFS are limited to vernal pool habitats in Oregon and California and do not occur in riverine, marine, or other permanent bodies of water where fish are present. During the wet season, the females produce hardy resting eggs, called cysts, which survive the dry season and hatch when the rains come again.

During the field survey, no signs of VPFS were observed within the Project footprint or surrounding areas. The habitat on the Project Site is not suitable for VPFS as there are no vernal pool characteristics present (hydric soil, wetland vegetation, and hydrology). Potential suitable habitat for this species is unlikely due to the level of ground disturbance, urbanization, and agricultural development in the area.

CNDDDB records do not contain any observations of VPFS. According to CNDDDB records, the nearest occurrence of this species was in the Goshen 7.5-minute quadrangle, 8.1 miles northwest of the Project site in January 2017.

5.7. Nesting Birds

5.6.1 Chipping Sparrow (*Spizella passerine*)

Chipping Sparrows have frosty colored underparts, a pale face with a black line through the eye, and a bright rusty crown. In winter, Chipping Sparrows are subdued, buff brown, with darkly streaked upperparts. The black line through the eye is still visible, and the cap is a more subdued reddish brown.

This species prefers open wooded habitats with a sparse or low herbaceous layer and few shrubs, if any. In California, they usually nest in conifer trees but sometimes nest in deciduous trees or shrubs. Chipping Sparrows forage in nearby herbaceous and open shrub habitats, including dry margins of wet meadows.

During the field survey, the Soar biologist observed a flock of chipping sparrows (**page 27**) foraging in the field and taking cover in the thickets of switchgrass depicted in **Figure 18**. The chipping sparrow is common passerine species that did not appear in the records search of CNDDDB or IPaC databases. The Chipping Sparrow winters less commonly in Central Valley and southern California lowlands, and breeding season usually begins in April or May in more montane and woodland habitat.

Chipping sparrows were present during the site visit. There is no special status listing for this species other than the Migratory Bird Treaty Act.

5.6.2 Long-billed Curlew (*Numenius americanus*)

The Long-billed curlew (LOCU) is a large, long-legged shorebird with a very long, decurved bill. Body plumage is buff throughout, tinged with cinnamon or pink, and with upperparts streaked and barred with dark brown. Sexes appear similar in appearance, but femalea are larger with a longer bill than males.

LOCU spend the summers in areas of western North America with sparse, short grasses, including shortgrass and mixed-grass prairies as well as agricultural fields. After their young leave the nest they may move to areas with taller, denser grasses. such as shortgrass prairies, alkali lakes, wet pastures, tidal mudflats, and agricultural fields. In winter, LOCU prefer wetlands, tidal estuaries, mudflats, flooded fields less than 6 inches deep, and beaches.

Agricultural fields provide potential habitat. However, habitat quality is low due to agricultural ground disturbance and urbanization in the area. There are no CNDDDB records of species observation in the vicinity of the Project area.

5.6.3 Marbled Godwit (*Limosa fedoa*)

Marbled Godwits (MAGO) are large shorebirds that have a slightly upturned bill with a dark tip and pinkish base, long legs, and are rich buff-brown all over. In addition to having cinnamon wing linings and an orangish stripe in their wings, their breeding plumage consists of barring across their chest. Nonbreeding plumage consists of a plain breast, and juveniles look similar to nonbreeding adults.

Marbled Godwits breed in shortgrass prairies near wetlands. They avoid areas with taller vegetation and occur more often in native grass prairies with green needle grass, western wheatgrass, blue grama, needle-and-thread, and little blue stem. On the wintering grounds, Marbled Godwits forage and rest along coastal mudflats, estuaries, and sandy beaches.

Agricultural fields provide potential habitat. However, habitat quality is low due to agricultural ground disturbance and urbanization in the area. There are no CNDDDB records of species observation in the vicinity of the Project area.

5.6.4 Swainson's hawk (*Buteo swainsoni*)

Swainson's hawks (SWHA) can be quite variable. They are usually light-bellied birds with a dark or reddish-brown chest and brown or gray upperparts. They have distinctive underwings with white linings that contrast strongly with the blackish flight feathers. Most males have gray heads; females tend to have brown heads. Dark individuals also occur; these vary from reddish to nearly all black, with reduced contrast on the underwings.

SWHA favor open habitats for foraging. Although much of their native prairie and grassland habitat has been converted to crop and grazing land, they have adjusted well to agricultural settings. Suitable habitats include plains, dry grassland, farmland, and ranch country. SWHA most commonly breed in prairie regions

with scattered groves of trees for nest sites. Less common breeding habitats are dry grassland and heavily farmed row-cropland.

During the site visit there were no observation of SWHA. The area within and proximate to the Project Site is poor raptor nesting habitat due to urban development and lack of nesting habitat features. However, there is foraging habitat on the Project Site. The nearest recent occurrence of SWHA was 6 miles northwest of the Project site in 2012.

5.6.5 Tricolored blackbird (*Agelaius tricolor*)

Tricolored Blackbirds (TRBL) have a stocky, broad-shouldered look and when perched often look humpbacked. Like other members of the blackbird family, they have a slender conical bill and a longish tail. Females are smaller than males. Male TRBL are entirely black with a bright red shoulder patch bordered below by a white to cream-colored band. Females are dark gray-brown overall with streaked bellies and backs and a cream-colored eyebrow. Immature male birds are brownish black overall with gray mottling depending on their age.

Tricolored Blackbirds nested in wetlands with cattails, bulrushes, and willows, more recently TRBL have also been found nesting in patches of Himalayan blackberry near stock ponds or irrigated pastures in the foothills of the Sierra Nevada, California.

Potential habitat might be present in the surrounding area, but not in the immediate Project footprint. There are no CNDDDB records of species observation in the vicinity of the Project area.

5.6.6 Whimbrel (*Numenius phaeopus*)

The Whimbrel is a large shorebird with a long neck, legs and down-curved bills. They are streaked, buffy, crown dark and have a distinct light stripe in the middle. Juveniles are similar to adults, but have light spots on their back, a less distinct crown stripe, more buff breast, and finer streaking on the neck and chest.

On their wintering grounds, Whimbrels feed mostly on tidal mudflats and sandflats; they also forage in saltmarshes, lagoons, estuaries, and on reefs and rocky shorelines where small crabs are available. Whimbrels roost in flocks in marshes, meadows, fields, dunes, and oyster beds. In some places, they nest in drier upland environments, but over much of the breeding range they use wetter lowlands with grasses, sedges, mosses, lichens, small shrubs, and stunted trees.

Agricultural fields provide potential habitat. However, habitat quality is low due to agricultural ground disturbance and urbanization in the area. There are no CNDDDB records of species observation in the vicinity of the Project area.

5.7 Plants

5.7.1 California jewelflower (*Caulanthus californicus*)

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

During the field survey, the Soar Biologist did not observe signs of CJ within the Project footprint or surrounding areas. According to CNPS records, CJ is presumed extirpated in Tulare County. Potential suitable habitat is eliminated via ground disturbance, urbanization, and agricultural development in the area.

5.7.2 San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*)

San Joaquin Adobe Sunburst (SJAS) is listed as Threatened on the Federal level and Endangered on the State level. SJAS is an annual herb ranging from 10 to 46 cm (4-18 inches) tall, loosely covered with white, woolly hairs. SJAS is found in valley grassland and foothill woodland and occurs only on heavy adobe clay soils. The bright yellow flowers are solitary at the ends of the branches and bloom between March and May.

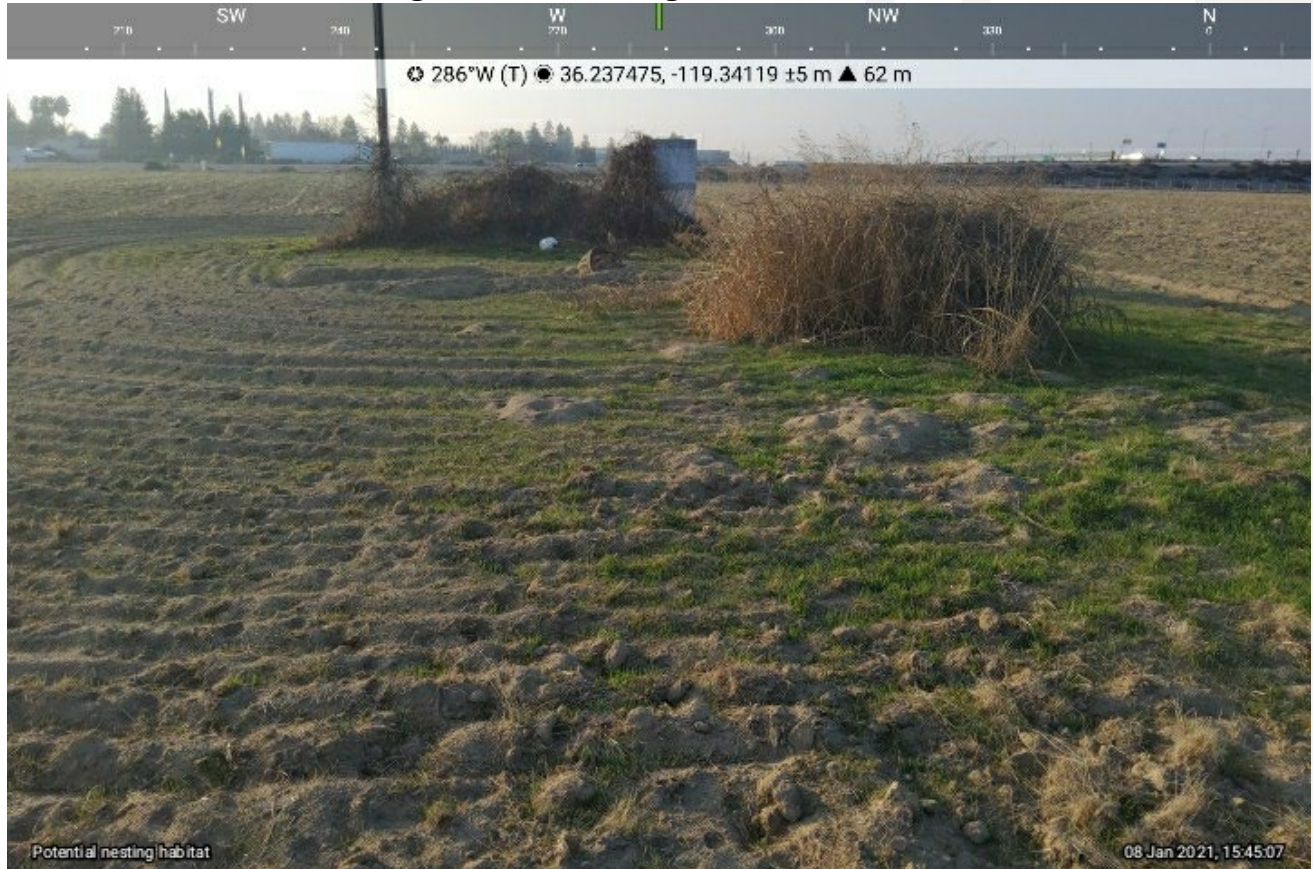
During the field survey, the Soar Biologist did not observe signs of SJAS within the Project footprint or surrounding areas. Potential suitable habitat is eliminated via ground disturbance, urbanization, and agricultural development in the area.

4.2 Field Reconnaissance Photos

Figure 17 – Ground Disturbance



Figure 18 – Switchgrass Thickets



A flock of chipping sparrows was observed foraging and taking cover in these witchgrass thickets. Location: **36.237502, -119.341409**

Figure 19 – Powerline Pole



Figure 20 – Collapsed Burrow



Figure 21 – Small Mammal Burrow

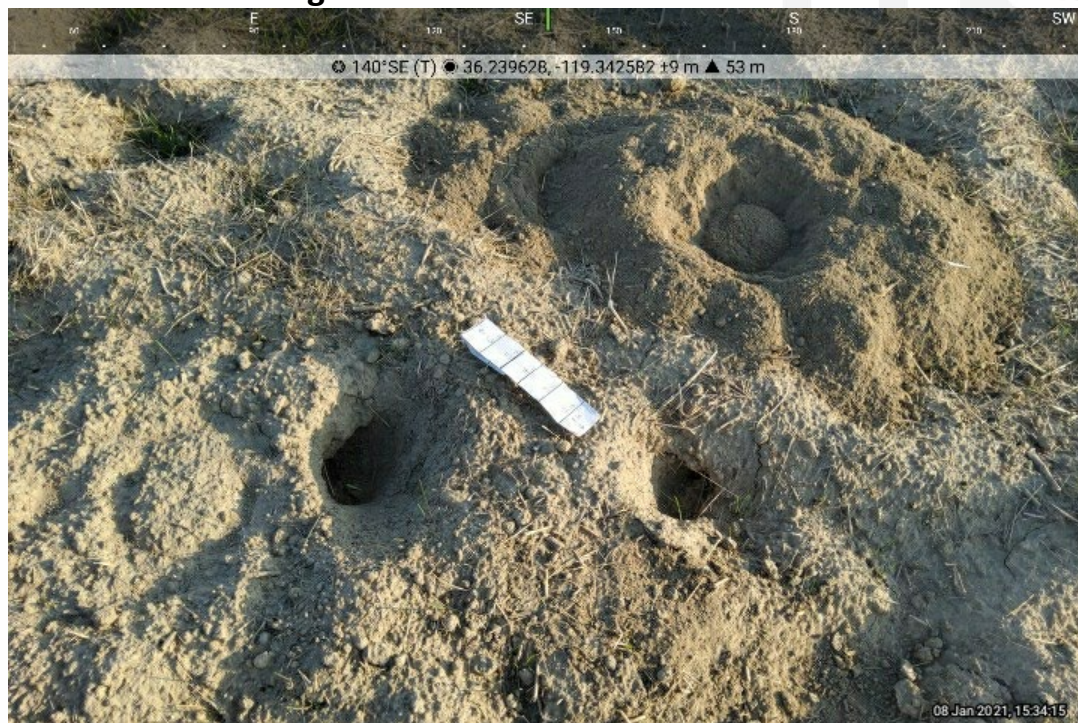


Figure 22 – Ground Squirrel Mound



Figures 23 – Culvert of Irrigation Ditch Along Eastern Boundary



Figure 24 – Culvert of Irrigation Ditch Along Eastside of Southern Boundary

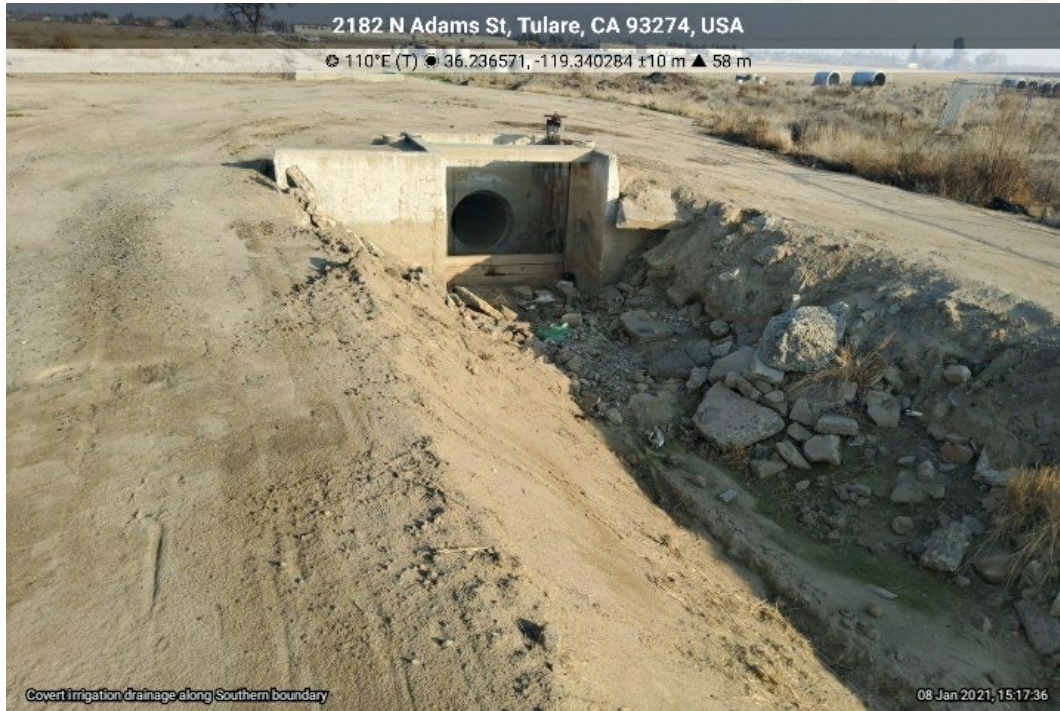
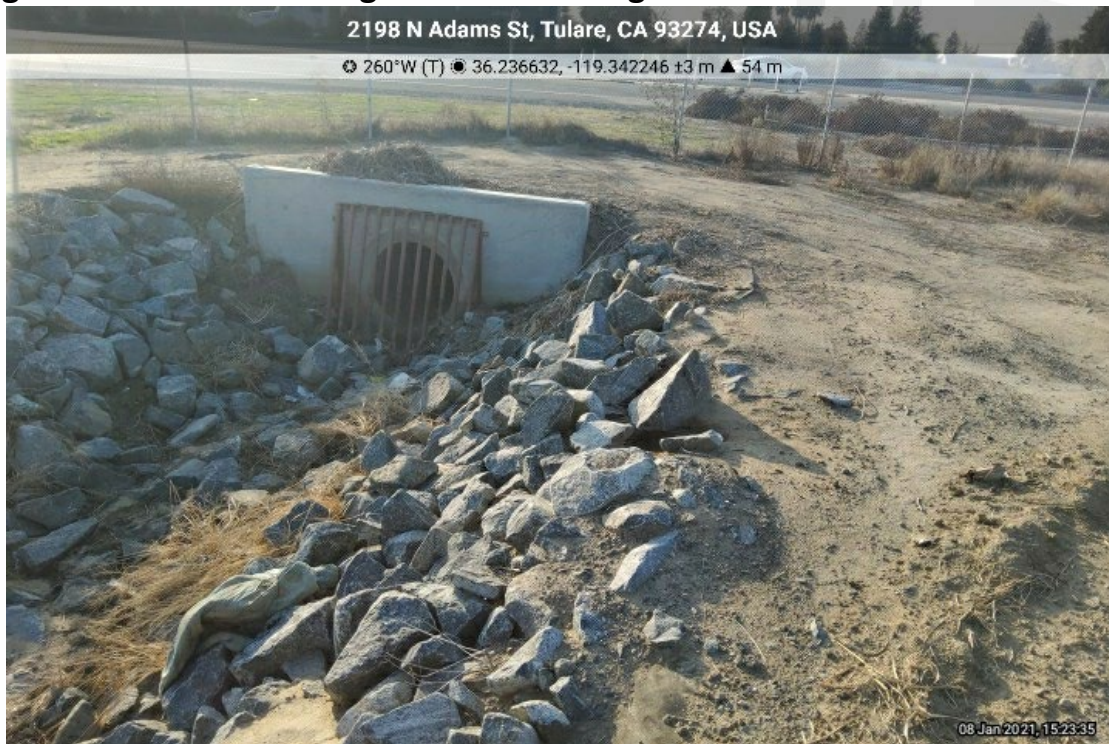


Figure 25 – Culvert of Irrigation Ditch Along Westside of Southern Boundary



Figures 26 – Stormwater Infiltration Basin Adjacent to Southern Boundary



Figure 27 – Underground AT&T Line

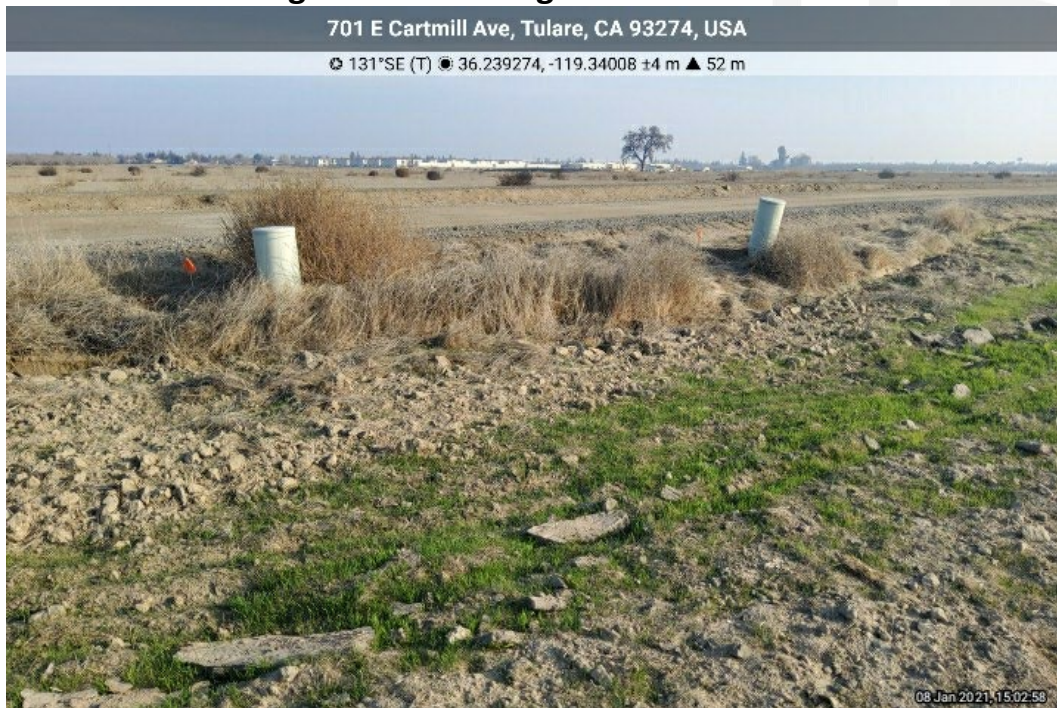


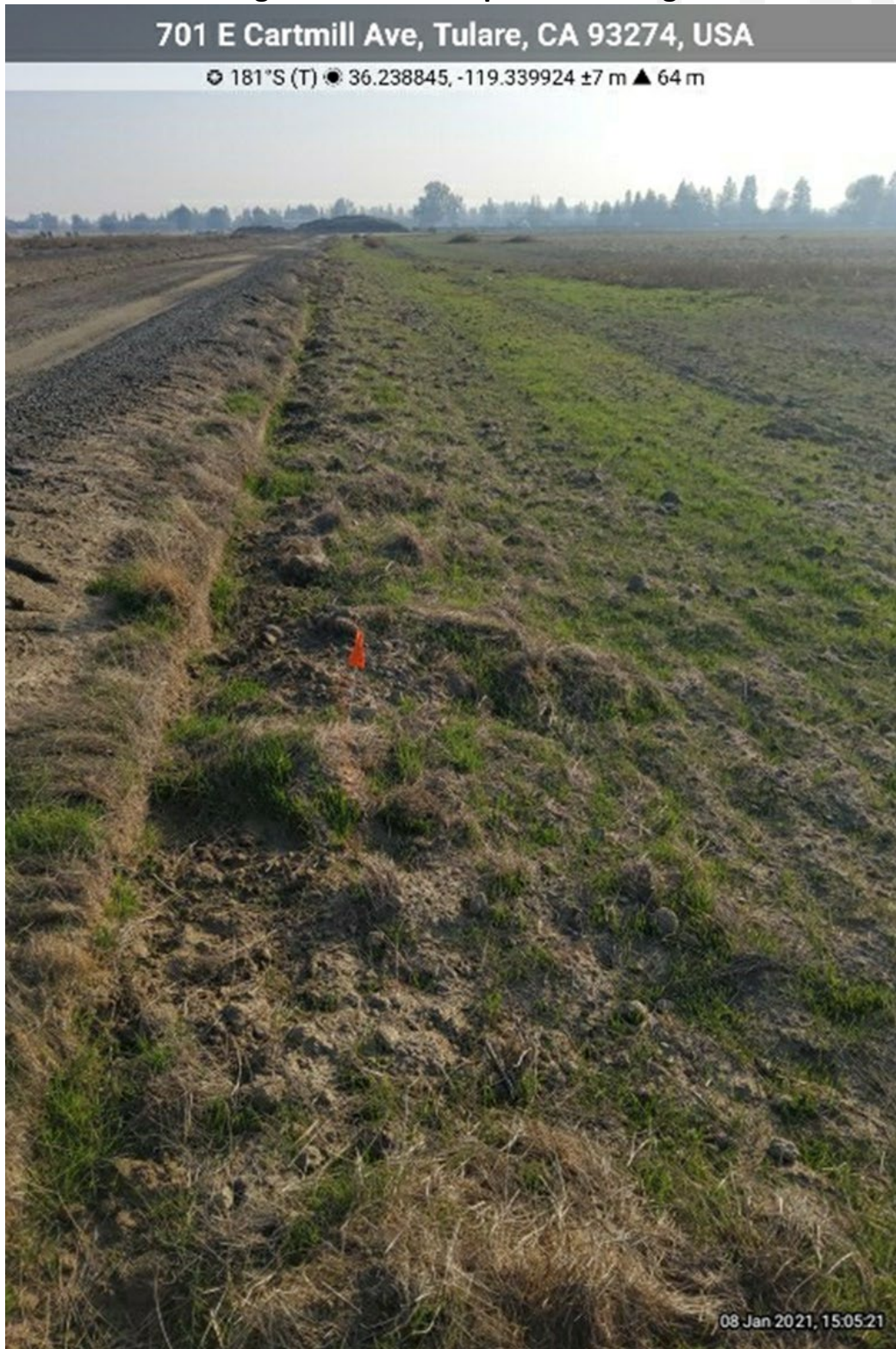
Figure 28 – Box Associated with Underground AT&T Line



Figure 29 – Close-up of AT&T Flag



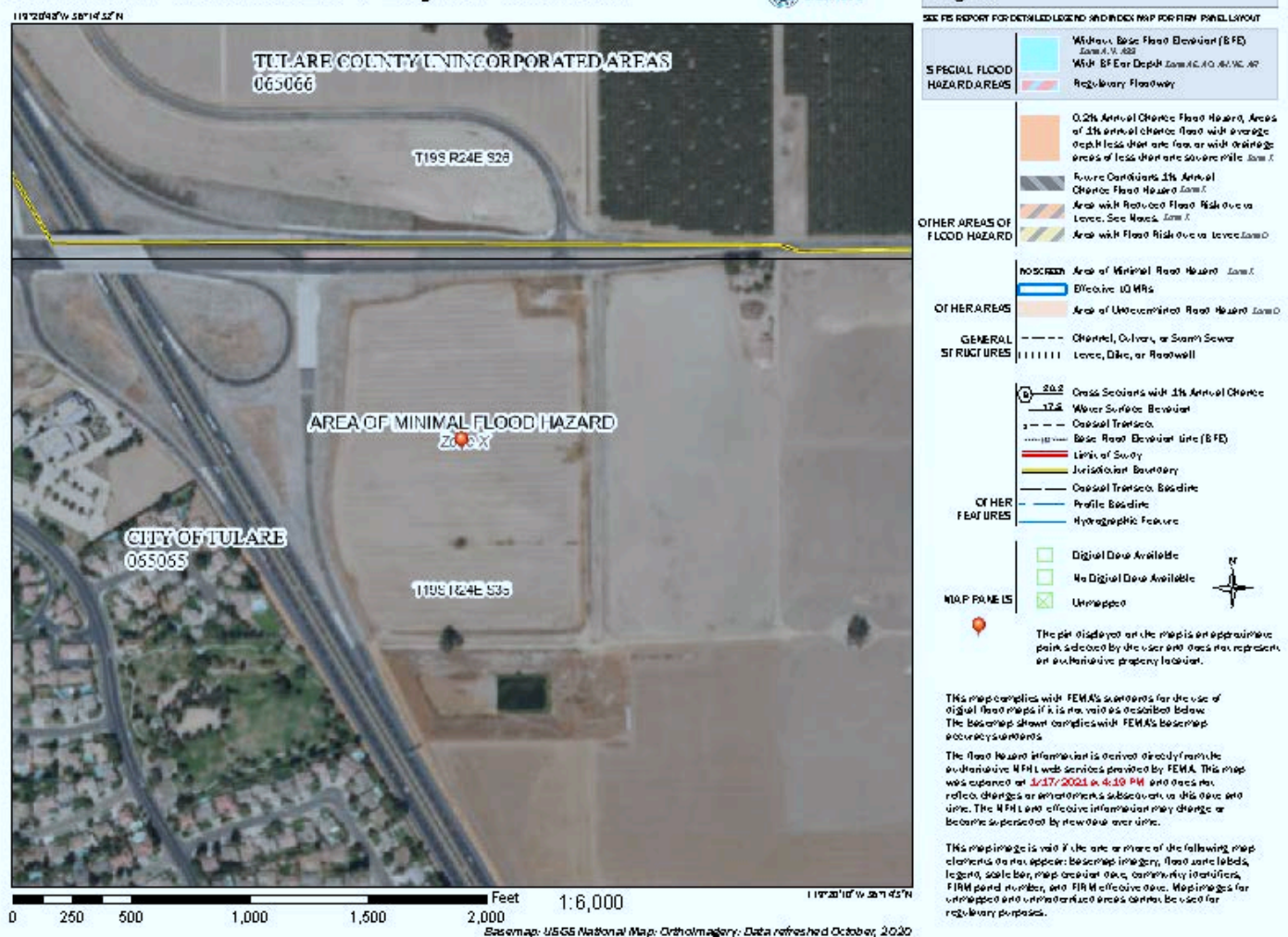
Figure 30 – Close-up of AT&T Flag



4. Presence of Potential Jurisdictional Waters or Wetlands

Preliminary jurisdictional delineation of Waters of the United States is considered outside the scope of this proposal. The presence of potential jurisdictional waters or wetlands can be determined through researching references located in Federal Emergency Management Agency (FEMA) flood inundation maps, general and community plans, mitigation plans, and technical support documents for application of the Clean Water Rule.

National Flood Hazard Layer FIRMette



6. Findings

There were no observations of special-status species during the Biological Assessment. However, a flock of chipping sparrows were observed foraging within the Project boundary and taking cover in thickets of switchgrass (*Panicum virgatum*) and Johnson grass (*Sorghum halepense*), proximate to the center of the Project site. There are no trees on the Project boundary, however these thickets could potentially provide low quality nesting habitat for this and other bird species. An old, inactive powerline pole, not connected to any wires, stands within the switchgrass thickets. This pole did not appear to have any woodpecker cavities. There are no active powerline poles within the Project footprint; however, there is an underground AT&T line along the eastern boundary.

The Project site is a 22.25 acre vacant agricultural field, highly disturbed with visible tilling marks from agricultural equipment in the soil. There were 3 ground squirrel mounds (**Figure 22**) but no openings were observed. Russian thistle (*Kali targus*), ripgut brome (*Bromus diandrus*), and other ruderal or perennial grasses are sparsely spread throughout the field. Immediately outside the Project boundary, there are some water features that might provide potential suitable habitat for some amphibian species, an irrigation ditch that runs along the eastern and southern boundary of the project, and a stormwater infiltration basin just outside the southern boundary.

During the habitat assessment, Soar Environmental did not observe any of the referenced special-status species within the Project Footprint. The proposed development of this parcel is unlikely to adversely affect any special-status species and is likely to have no effect for CEQA considerations. The findings for this report are summarized below.

Table 3– Special Status Species Findings

Species Name	Species Observed on Project Site	Suitable Habitat on Project Site
Mammals		
San Joaquin Kit Fox Vulpes (<i>macrotis mutica</i>)	No	No
Tipton Kangaroo Rat (<i>Dipodomys nitratooides nitratooides</i>)	No	Yes
Reptiles		
blunt-nosed leopard lizard (<i>Gambelia silus</i>)	No	Yes
Giant Garter Snake (<i>Thamnophis gigas</i>)	No	No
Amphibians		
California Red-legged Frog (<i>Rana draytonii</i>)	No	No
California Tiger Salamander (<i>Ambystoma californiense</i>)	No	Yes
Fishes		
Delta Smelt (<i>Hypomesus transpacificus</i>)	No	No
Crustaceans		
Crotch bumble bee (<i>Bombus crotchii</i>)	No	No
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	No	No
Vernal Pool Fairy Shrimp (<i>Branchinecta lynchi</i>)	No	No
Nesting Birds		
Chipping sparrow* (<i>Spizella passerina</i>)	Yes	Yes

Long-billed Curlew (<i>Numenius americanus</i>)	No	Yes
Marbled Godwit (<i>Limosa fedoa</i>)	No	Yes
Swainson's hawk (<i>Agelaius tricolor</i>)	No	No
Tricolored blackbird (<i>Agelaius tricolor</i>)	No	Yes
Whimbrel (<i>Numenius phaeopus</i>)	No	No
Flowering Plants		
San Joaquin Adobe Sunburst <i>Pseudobahia peirsonii</i>	No	No
California Jewelflower <i>Caulanthus californicus</i>	No	No

*Species observed during habitat assessment.

7. Recommendations

Chipping sparrow (*Spizella passerina*) were observed foraging in the field during the pedestrian survey. Switchgrass thickets located at **36.237475, -119.34119 (Figure 18)** are the only possible nesting feature within the project boundary. However, these switchgrass thickets did not appear to have any nest structures. Suitable habitat for other bird species may be present within the proposed Project footprint, depending on the time of year that Project activities occur.

Nesting Bird Recommendations

Soar Environmental recommends performing construction activities outside the bird nesting season (February 15 to September 15). If Project activities are proposed during the nesting season, Soar Environmental recommends that a qualified biologist survey the Project Footprint, including the switchgrass thickets proximate to the center of the Project site for nesting birds. There is no suitable nesting habitat for Swainson's hawk, however there is potential foraging ground. Active nests of non-raptors should be avoided by at least 50 feet. Any nest discovered should be monitored during Project activities for signs of distress. If signs of distress are observed, Project activities should be adjusted to prevent further disturbance to the birds.

Blunt-nosed leopard lizard Recommendations Soar Environmental recommends that the stormwater features identified in the Habitat Map (Figure 3), and any small mammal burrows within the Project footprint be surveyed for Blunt-nosed leopard lizard by a qualified biologist no more than 30 days prior to ground disturbance activities. All blunt-nosed leopard lizard surveys will be performed in accordance with the most recent CDFW survey protocols (CDFW 2004).

California tiger salamander Recommendations

Soar Environmental recommends any small mammal burrows within the Project footprint be surveyed for California tiger salamander by a qualified biologist no more than 30 days prior to ground disturbance activities, and verify burrows are clear of any wildlife species when ground disturbing activities occur. All amphibian surveys will be performed in accordance with the most recent USFWS/CDFW survey protocols (USFWS/CDFW 2003).

Tipton kangaroo rat Recommendations

Soar Environmental recommends the presence of a qualified biological monitor 30 days prior to ground disturbance activities. Although no burrows specific to the dimensions of TKR were observed, given recent ground disturbing activities it is possible for burrows or dens to become established prior to implementation of the proposed Project.

8. 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.

9. Works Cited

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Appendix C

Cultural Resources Technical Memo



TECHNICAL MEMORANDUM

Date: February 11, 2021
To: Molly McDonnel, Associate Planner, 4Creeks, Inc.
From: Consuelo Sauls, MA, RPA, Archaeologist
Subject: Cultural Resources Technical Memorandum for Cartmill Commercial Project, City of Tulare, Tulare County, California

Introduction

The Cartmill Commercial Project (Project) is a Development Master Plan located in the City of Tulare, California at Cartmill Avenue and Highway 99. The land is a vacant lot currently zoned for commercial use (C-3), and the proposed project consists of the zoning and construction of 22.25 acres of commercial development for a total of 969,027 square feet of commercial buildings, parking lots, and associated landscaping.

Project Location

The proposed Project is located at the southeast corner of Highway 99 and East Cartmill Avenue in the City of Tulare, Tulare County, California (Figure 1). The Project site is visible in Township 19 South, Range 24 East, Sections 35 on the United States Geological Survey (USGS) 7.5-minute series Tulare, California topographic quadrangle map (Figure 2).

Methodology

In order to assess potential Project impacts to cultural resources under the California Environmental Quality Act (CEQA), Taylored Archaeology completed the following specific tasks: (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; and (3) conducting archival research of historical topographic maps, historical aerial photographs, and literature review.

Results

Records Search Review

The SSJVIC, CSU Bakersfield provided the results of cultural resources records search (File No. 21-015) on January 19, 2021 for the Cartmill Commercial Project in the city of Tulare, Tulare County, California (Attachment B).

The records search covered the Project area and all land within a 0.5-mile radius of the Project and included a review of the following: the Archaeological Determinations of Eligibility, the National Register of Historic Places, the California Registry of Historic Resources, the California Points of Historical Interest, the California Historical Landmarks, the California State Historic Resources Inventory and a review of cultural resources reports on file with the SSJVIC.

The records results indicated that the Project site was previously surveyed for cultural resources and three prior cultural resource studies were conducted within the Project area (Mitchell 1957, William Self Associates 1995, Haley and O'Brien 2011). Further review of Mitchell 1957 revealed it to be a narrative retelling of the 1851 Mariposa War and is not relevant to the project area. Five previous cultural resource studies were conducted within a 0.5-mile radius (Hatoff et al. 1995; Wickstrom and Anderson 1997; Hovey 1999; Dodd 2000; Busby 2006a; and Busby 2006b).

No cultural resources were recorded within the Project site. Three cultural resources were recorded within a 0.5-mile radius of the Project area. All three cultural resources were historic era: 1) a corrugated metal building adjacent to the northeast corner of the Project site, built circa 1950 and demolished circa 2010, 2) the Liberty Ditch canal, and 3) the Old 99 Ditch of the Tulare Irrigation District.

The most recent cultural resource study within the Project boundary is the *Archaeological Survey Report for the Cartmill Avenue Interchange Project, City of Tulare, Tulare County, California* prepared by Traci O'Brien with ICF for Caltrans District 6, dated December 7, 2011. A review of this study showed the investigation surveyed only the northern 10 percent of the Project site. The survey found no cultural resources within the current Project boundary.

Native American Heritage Commission

On January 8, 2021, Taylored Archaeology requested a search of the Native American Heritage Commission (NAHC) Sacred Lands File and for a list of Native American individuals or groups associated with the project area who might have information relating to resources to identify any resources within the project area. NAHC responded on January 27, 2021, stating that the results of the Sacred Lands File (SLF) reviewed is negative (Attachment C).

Kerri Vera, Director of the Department of Environmental Protection for the Tule River Indian Tribe, replied stating that the tribe had no knowledge of culturally sensitive items or sites within the proposed Project area, and requested to be consulted if items or sites are revealed during research or ground disturbance. No other comments were received from any other of the tribes contacted via letter on January 28, 2021, with email and phone call follow-up.

Archival Research

A review of historical aerial photographs and historical topographic maps showed the Project site was historically used for agricultural purposes and no structures appear to have been constructed within the Project boundary. Additionally, a review of *A Geoarchaeological Overview and Assessment of Caltrans Districts 6 and 9* (Meyer et al. 2010) shows the City of Tulare as having a moderate sensitivity for archaeological resources.

Conclusion

Based on the results of the SSJVIC records search, the NAHC Sacred Lands File search, Native American outreach, and additional archival research, the chance of encountering subsurface archaeological or historical deposits on the Project site is considered to be relatively low.

However, according to SSJVIC records, only the northernmost 10 percent of the Project site has been previously surveyed for cultural resources and the most recent survey is more than five years old. Subsurface prehistorical or historical deposits may potentially be present on the Project site and could potentially be encountered during Project construction or ground disturbing activities. Therefore, to



mitigate the Project's potential impact to cultural resources, the following mitigation measures are proposed. Implementation of the below recommended mitigation measures would reduce the Project potential impact to cultural resources to a less-than-significant level under CEQA.

Mitigation Measure (MM) CUL-1: Prior to the commencement of ground disturbing activities, a qualified archaeologist shall perform a site-specific pedestrian survey for prehistorical and historical deposits. If prehistoric or historic deposits are encountered during the survey, additional investigation may be warranted.

Mitigation Measure (MM) CUL-2: In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project area, all work should be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.

Mitigation Measure (MM) CUL-3: 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 NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

A handwritten signature in black ink that reads "Consuelo Sauls".

Consuelo Sauls, MA, RPA
Archaeologist

Attachment A: Project Maps
Attachment B: Records Search Results
Attachment C: Native American Heritage Commission

References

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- 2006a Cultural Resources Assessment and Paleontology Review for a Wal-Mart Store, Cartmill Avenue Between SR99 and UPRR Tracks, City of Tulare, Tulare County, California. Basin Research Associates, Inc.
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California Office of Historic Preservation

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ATTACHMENT A

Project Maps

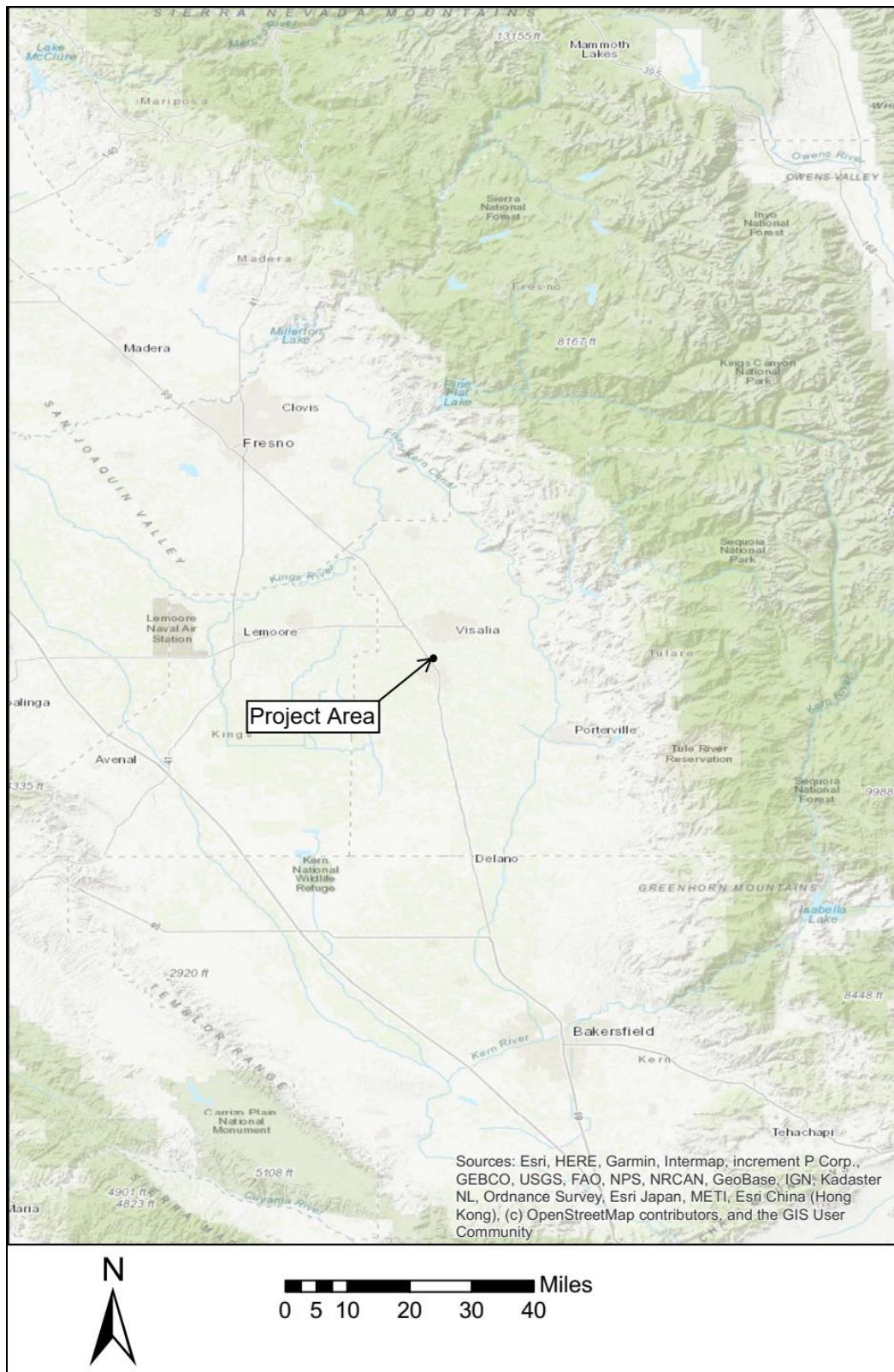


Figure 1 Project vicinity in Tulare County, California.

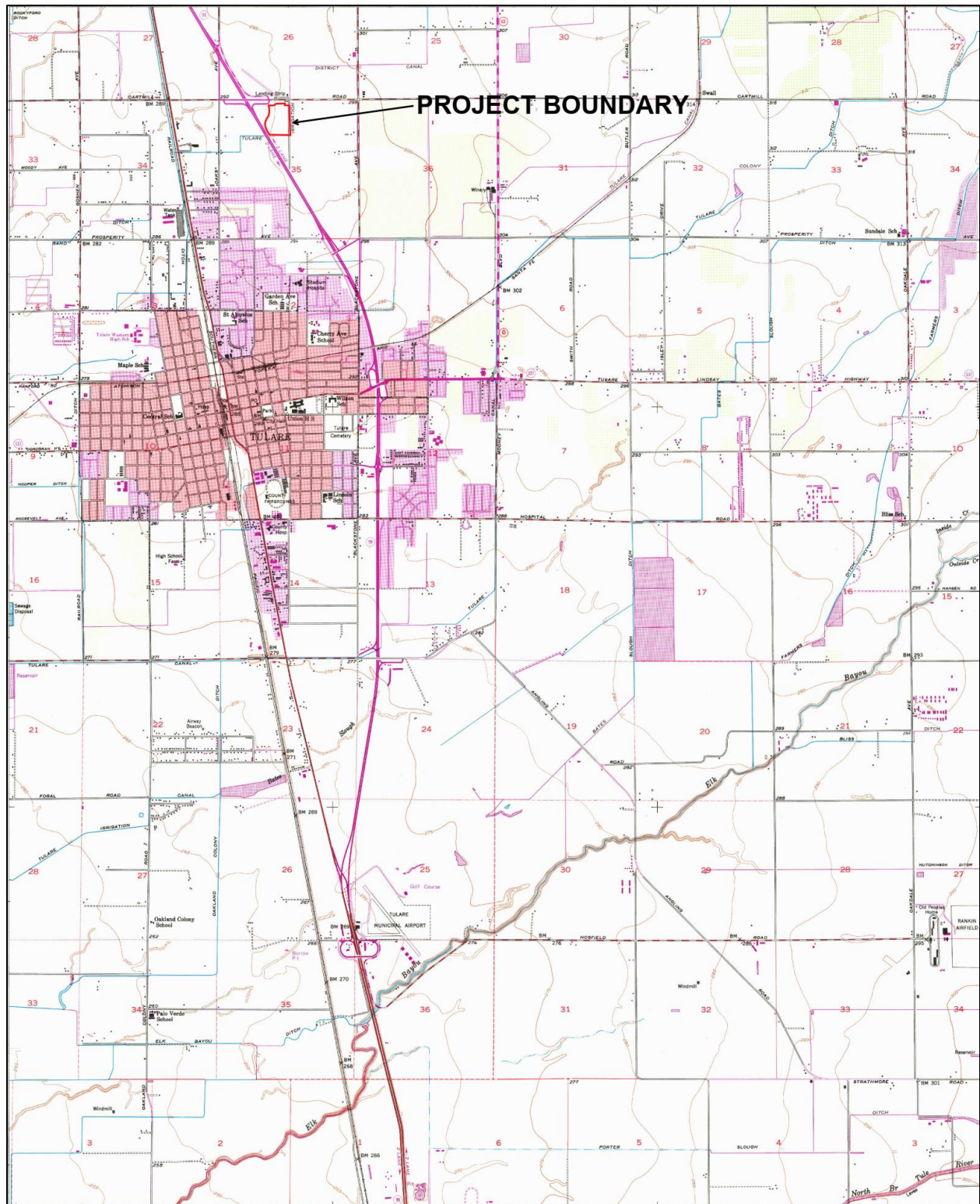


Figure 2 Project location on the USGS Tulare, CA 7.5-minute quadrangle.



Figure 3 Aerial view of the Project boundary.

ATTACHMENT B

Records Search Results



1/19/2021

Consuelo Sauls
Tailored Archaeology
6083 N. Figarden Drive, Suite 616
Fresno, CA 93722

Re: Cartmill Commercial Project Plan
Records Search File No.: 21-015

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-54-005210, 005211, 005296
Reports within project area:	TU-00041, 01190, 01677
Reports within 0.5 mile radius:	TU-00102, 00103, 01008, 01310, 01311

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

Note: "Other" report PDFs and database products were omitted per the Data Request Form.

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.glorerecords.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,

Celeste M. Thomson
Coordinator

ATTACHMENT C

Native American Heritage Commission

NATIVE AMERICAN HERITAGE COMMISSION

January 27, 2021

Conselo Sauls

Taylored Archaeology

Via Email to: csaulsarchaeo@gmail.com

Re: Cartmill Commercial Project, Tulare County

Dear Ms. Sauls:

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: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,



Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paite/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

COMMISSIONER
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(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Appendix D

VMT Analysis



Ms. Molly McDonnel
4Creeks
324 South Santa Fe Street, Suite A
Visalia, California 93292

March 4, 2021

Subject: Vehicle Miles Traveled Impact Analysis
Proposed Tentative Parcel Map
Southeast of Cartmill Avenue / State Route 99 Interchange
Tulare, California

Dear Ms. McDonnel:

The purpose of this report is to present the results of a traffic impact analysis estimating the transportation impacts of the subject project based on vehicle miles traveled (VMT).

Project Description

The proposed project site is located on approximately 22.25 acres located southeast of the State Route (SR) 99 interchange at Cartmill Avenue, and southwest of the existing intersection of Akers Street and Cartmill Avenue in Tulare, California. The eastern boundary of the site will be Gem Street, which aligns with the existing Akers Street to the north of Cartmill Avenue. The proposed Project includes 10 parcels zoned C-3 for retail commercial in a regional commercial land use with access directly to Gem Street.

The Project site location is presented in the attached Figure 1, Site Vicinity Map, and the Project site plan is presented in the attached Figure 2, Site Plan.

Significance Criteria

The State of California Governor's Office of Planning and Research document entitled *Technical Advisory on Evaluating Transportation Impacts in CEQA* dated December 2018 (Technical Advisory) provides guidance for determining a project's transportation impacts based on VMT.

For retail projects, the Technical Advisory indicates: *"Generally, lead agencies should analyze the effects of a retail project by assessing the change in total VMT because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns."* The Technical Advisory's recommended significance threshold for retail projects is stated as follows: *"A net increase in total VMT may indicate a significant transportation impact."*

The Technical Advisory also states the following: *"Because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT*

(i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts.

"By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact. Regional-serving retail development, on the other hand, which can lead to substitution of longer trips for shorter ones, may tend to have a significant impact. Where such development decreases VMT, lead agencies should consider the impact to be less-than-significant.

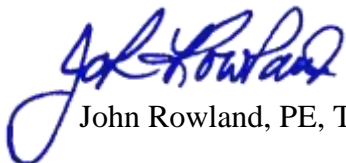
"Many cities and counties define local-serving and regional-serving retail in their zoning codes. Lead agencies may refer to those local definitions when available, but should also consider any project-specific information, such as market studies or economic impacts analyses that might bear on customers' travel behavior. Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving. Generally, however, retail development including stores larger than 50,000 square feet might be considered regional-serving, and so lead agencies should undertake an analysis to determine whether the project might increase or decrease VMT."

CEQA Transportation Impact Analysis

It is anticipated that the development that will occur on the Project site would consist of local-serving retail uses and uses that would attract trips from the adjacent freeway. Since there is already a regional shopping center in the area (Tulare Outlets), it is unlikely that the Project would be developed as a regional center, or that it would generate new regional trips not already occurring at the Tulare Outlets. Furthermore, by constructing new C-3 zoning opportunities in Tulare, the need to travel longer distances to Visalia is reduced. Finally, with a maximum parcel size of 3.38 acres, stores larger than 50,000 square feet are not likely to be constructed. As such, it is recommended that the Project be presumed to cause a less-than-significant transportation impact.

Thank you for the opportunity to work with you on this project. Please feel free to call our office if you have any questions.

PETERS ENGINEERING GROUP



John Rowland, PE, TE

Attachments: Figures 1 and 2



Appendix E

Energy Calculations

Construction Equipment Energy Use

Phase Name	Off Road Equipment Type	Off Road Equipment Unit Amount ¹	Usage Hours Per Day ¹	Horse Power (lbs/sec) ¹	Load Factor ¹	Total Operational Hours	BSFC ²	Fuel Used (gallons) ³	MBTU ⁴
Site Preparation	Rubber Tired Dozers	3	8	247	0.4	240	0.367	1224.12	170.1534
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	320	0.408	659.14	91.61992
Grading	Excavators	2	8	158	0.38	480	0.367	1487.78	206.8018
Grading	Graders	1	8	187	0.41	240	0.367	949.94	132.0411
Grading	Rubber Tired Dozers	1	8	247	0.4	240	0.367	1224.12	170.1534
Grading	Scrapers	2	8	367	0.48	480	0.367	4365.22	606.7655
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	480	0.408	988.70	137.4299
Building Construction	Cranes	1	7	231	0.29	2100	0.367	7262.51	1009.489
Building Construction	Forklifts	3	8	89	0.2	7200	0.408	7355.36	1022.396
Building Construction	Generator Sets	1	8	84	0.74	2400	0.408	8561.97	1190.114
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	6300	0.408	12976.74	1803.767
Building Construction	Welders	1	8	46	0.45	2400	0.408	2851.24	396.3219
Paving	Pavers	2	8	130	0.42	320	0.367	901.99	125.3762
Paving	Paving Equipment	2	8	132	0.36	320	0.367	785.03	109.1186
Paving	Rollers	2	8	80	0.38	320	0.408	558.31	77.60506
Architectural Coating	Air Compressors	1	6	78	0.48	120	0.408	257.85	35.84128
Total								52410.03	7284.99

Construction Phases

PhaseNumber	Phase Name	Phase Type	Phase Start Date	Phase End Date	Num Days Week	Total Number of Days
1	Site Preparation	Site Preparation	2021/07/29	2021/08/11	5	10
2	Grading	Grading	2021/08/12	2021/09/22	5	30
3	Building Construction	Building Constr	2021/09/23	2022/11/16	5	300
4	Paving	Paving	2022/11/17	2022/12/14	5	20
5	Architectural Coating	Architectural Co	2022/12/15	2023/01/11	5	20

Notes

1. CalEEMod Default Values Used
2. BSFC - Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367
3. Fuel Used = Load Factor x Horsepower x Total Operational Hours x BSFC / Unit Conversion
4. MBTU calculated for comparison purposes. Assumed 1 gallon of diesel = 0.139 MBTU

Mobile Energy Use (Construction)

Worker Trips

	Daily Worker Trips ¹	Worker Trip Length ¹	VMТ/Day	MPG Factor (EMFAC2017)	Gallons of Gas/Day	# of Days	Total Gallons of Gas	MBTU
Site Preparation	7	10.8	75.6	29.23	2.6	10	25.9	3.002533
Grading	8	10.8	86.4	29.23	3.0	30	88.7	10.2944
Building Construction	9	10.8	97.2	29.23	3.3	300	997.6	115.812
Paving	6	10.8	64.8	29.23	2.2	20	44.3	5.147199
Architectural Coating	1	10.8	10.8	29.23	0.4	20	7.4	0.857867
Total	N/A	N/A	N/A	N/A	N/A	380	1163.9	135.114

Vendor Trips

	Daily Vendor Trips	Vendor Trip Length	VMТ/Day	MPG Factor	Gallons of Diesel/Day	# of Days	Total Gallons of Diesel	MBTU
Building Construction	94	7.3	686.2	8.43	81.4	300	24419.92883	3394.37

Fleet Characteristics

	Vehicle Class	Fleet Mix	2024 MPG Factor (EMFAC2017)	Average MPG Factor
Assumed Vehicle Fleet for Workers	LDA	33%	33.24	29.23
	LDT1	33%	28.07	
	LDT2	33%	26.38	
Assumed Vehicle Fleet for Vendor Trips	MHD	50%	9.74	8.43
	HHD	50%	7.12	

Notes

1. CalEEMod Default values used
2. MBTU calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.11609 MBTU

Mobile Energy Use (Operations)

Total Annual VMT from Project (CalEEMod)	15,270,973
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Fleet Mix & Fuel Calculations

Vehicle Class	Proportion of Fleet Mix ¹	Annual VMT by Vehicle Class	Proportion of vehicle class using gas or diesel (EMFAC2017) ²		Annual VMT by Vehicle Class and Fuel Type		Fuel Efficiency (MPG) by Vehicle Class and Fuel Type (EMFAC2017)		Annual Fuel Use from Project (gallons)		MBTU/Year ³
			Gas	Diesel	Gas	Diesel	Gas	Diesel	Gas	Diesel	
LDA	64.92%	9913946.2	99%	1%	9820343.88	93602.33	33.24	55.42	295438.3	1689.1	34532.2
LDT1	3.32%	507210.1	100%	0%	507034.09	176.00	28.07	26.61	18060.6	6.6	2097.6
LDT2	20.60%	3146171.7	99%	1%	3124688.36	21483.31	26.38	41.19	118447.2	521.5	13823.0
MDV	9.72%	1483895.7	97%	3%	1445739.16	38156.56	20.49	28.86	70566.8	1322.0	8375.9
LHD1	0.08%	12354.2	43%	57%	5350.18	7004.04	8.49	17.95	629.9	390.3	127.4
LHD2	0.08%	12354.2	27%	73%	3381.90	8972.32	7.38	16.09	458.3	557.8	130.7
MHD	0.35%	53998.2	8%	92%	4241.82	49756.34	4.98	9.74	851.0	5107.7	808.8
HHD	0.13%	19989.7	0%	100%	3.09	19986.61	4.70	7.12	0.7	2807.2	390.3
OBUS	0.18%	26876.9	44%	56%	11731.86	15145.05	4.86	8.08	2414.5	1874.6	540.9
UBUS	0.10%	14736.5	77%	23%	11289.14	3447.35	4.62	9.98	2445.8	345.6	332.0
MCY	0.38%	58212.9	100%	0%	58212.95	0.00	37.85	NA	1538.1	0.0	178.6
SBUS	0.09%	14461.6	20%	80%	2948.43	11513.18	9.19	8.13	320.8	1416.9	234.2
MH	0.04%	6765.0	65%	35%	4406.32	2358.72	4.90	9.83	899.2	240.0	137.8
Total	100.00%	15270973.0			14999371.18	271601.82			512071.3	16279.4	61709.2

Fleet Characteristics

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: County

Region: Tulare

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT (Annual)	Trips (Annual)	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
Tulare	2024	HHDT	Aggregate	Aggregate	Gasoline	1	40832	5642	8.69	8689	4.70
Tulare	2024	LDA	Aggregate	Aggregate	Gasoline	200092	2758210730	325924543	82978.87	82978874	33.24
Tulare	2024	LDT1	Aggregate	Aggregate	Gasoline	20489	250774265	31894273	8932.61	8932608	28.07
Tulare	2024	LDT2	Aggregate	Aggregate	Gasoline	66393	838611285	105810710	31789.15	31789149	26.38
Tulare	2024	LHDT1	Aggregate	Aggregate	Gasoline	5502	58348244	26803634	6870.06	6870055	8.49
Tulare	2024	LHDT2	Aggregate	Aggregate	Gasoline	905	9488315	4406586	1285.70	1285695	7.38
Tulare	2024	MCY	Aggregate	Aggregate	Gasoline	9526	22280789	6611059	588.70	588698	37.85
Tulare	2024	MDV	Aggregate	Aggregate	Gasoline	68672	787150190	106279450	38420.97	38420974	20.49
Tulare	2024	MH	Aggregate	Aggregate	Gasoline	920	2631245	30111	536.98	536976	4.90
Tulare	2024	MHDT	Aggregate	Aggregate	Gasoline	423	7125304	2764314	1429.47	1429473	4.98
Tulare	2024	OBUS	Aggregate	Aggregate	Gasoline	141	1996552	922982	410.91	410910	4.86
Tulare	2024	SBUS	Aggregate	Aggregate	Gasoline	84	1324045	109782	144.05	144051	9.19
Tulare	2024	UBUS	Aggregate	Aggregate	Gasoline	76	2232433	99041	483.67	483665	4.62

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
Tulare	2024	HHDT	Aggregate	Aggregate	Diesel	6329	263877277	22366793	37063.11	37063112	7.12
Tulare	2024	LDA	Aggregate	Aggregate	Diesel	1810	26289809	2985204	474.41	474415	55.42
Tulare	2024	LDT1	Aggregate	Aggregate	Diesel	13	87050	14634	3.27	3271	26.61
Tulare	2024	LDT2	Aggregate	Aggregate	Diesel	390	5765743	658531	139.97	139970	41.19
Tulare	2024	LHDT1	Aggregate	Aggregate	Diesel	7282	76385011	29952675	4256.60	4256603	17.95
Tulare	2024	LHDT2	Aggregate	Aggregate	Diesel	2329	25172917	9581028	1564.92	1564922	16.09
Tulare	2024	MDV	Aggregate	Aggregate	Diesel	1548	20774799	2543773	719.77	719773	28.86
Tulare	2024	MH	Aggregate	Aggregate	Diesel	532	1408515	17405	143.32	143324	9.83
Tulare	2024	MHDT	Aggregate	Aggregate	Diesel	4433	83579546	12100911	8579.81	8579805	9.74
Tulare	2024	OBUS	Aggregate	Aggregate	Diesel	116	2577417	329811	319.02	319022	8.08
Tulare	2024	SBUS	Aggregate	Aggregate	Diesel	509	5170191	1919120	636.29	636286	8.13
Tulare	2024	UBUS	Aggregate	Aggregate	Diesel	22	681715	28821	68.34	68342	9.98

Notes

1. Used project-specific vehicle fleet mix for retail
2. Proportion of diesel vs. gasoline vehicles calculated based on total annual VMT for each vehicle class
3. MBTU Calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.116090 MBTU and 1 gallon of diesel = 0.139 MBTU