Draft Initial Study and Mitigated Negative Declaration for Frankwood Commons Commercial Village

September 2023

Prepared By:

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Prepared For:

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City of Reedley
845 G Street
Reedley, CA 93654

SECTION 1
CEQA Review Process

Project Title: Frankwood Commons Commercial Village

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 four acres in the City of Reedley. The Project would also subdivide the site into two parcels. The City of Reedley 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 Reedley 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

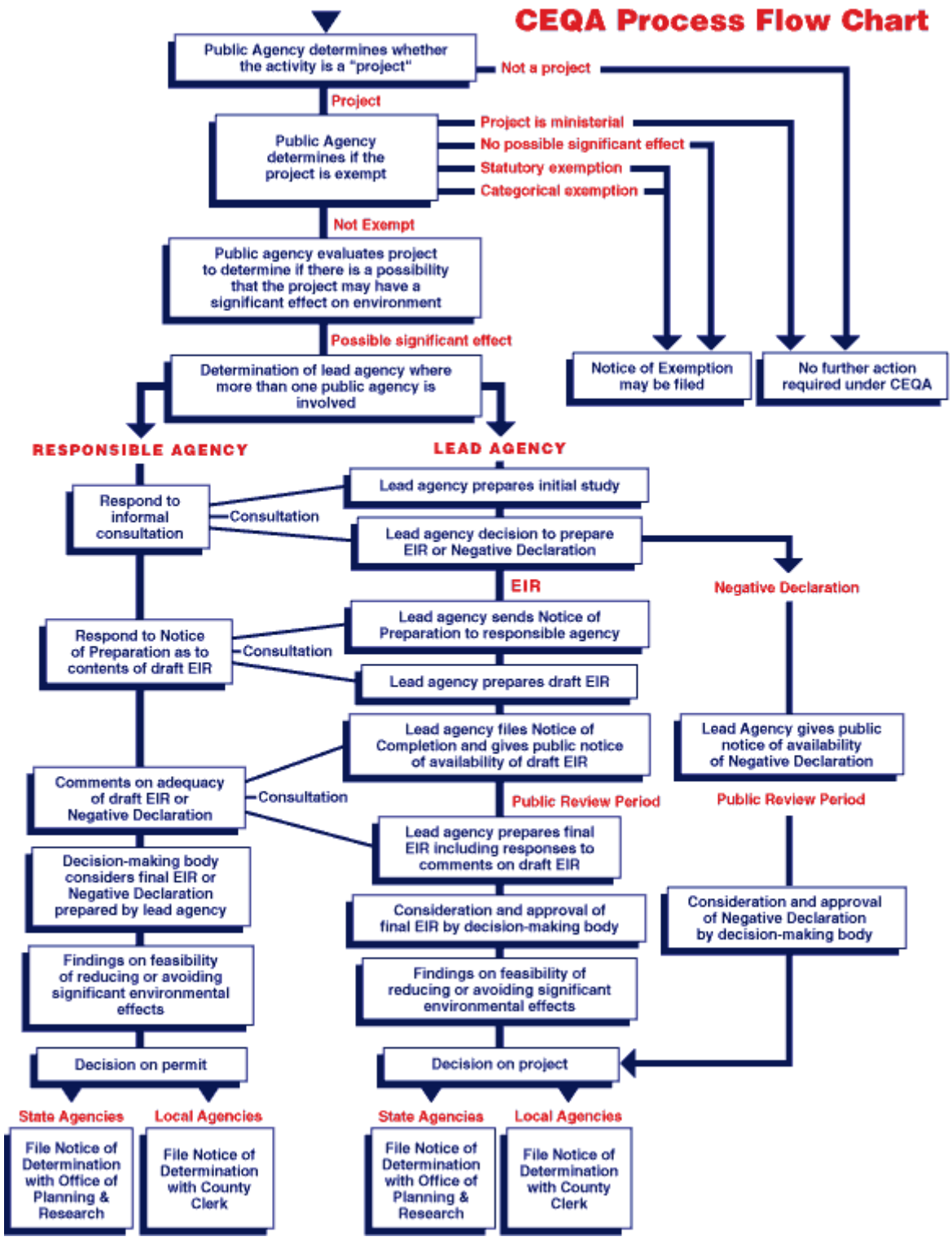
The Initial Study/Negative Declaration document is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed project. The environmental review process has been established to 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 Reedley, 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 Reedley
845 G Street
Reedley, CA 93654

SECTION 2

Project Title: Frankwood Commons Commercial Village, SPR 2022-1, TPM 2022-2

2.1 Project Background & Purpose

The proposed Project involves the development of a commercial development project on approximately 4.19 acres in the City of Reedley. The proposed Project includes a gas station/convenience store with a drive-through and a medical clinic. The gas station/convenience store will be approximately 5,200 square feet, while the medical clinic will be approximately 11,000 square feet. The existing and proposed zoning is CN, Neighborhood Commercial. The 2030 Reedley General Plan designates the Site as Neighborhood Commercial. The proposed land use is Neighborhood Commercial. The Project would subdivide the 4.19-acre Site into two parcels, one for each business. The Site will include 100 parking stalls and construct on-site and off-site infrastructure improvements. These streets have already been improved by the development of surrounding homes, including new and relocated utilities. The eastern half of Frankwood Avenue was expanded from a 30' ROW to a 42' ROW and has been built out to include a bike lane, sidewalk, landscaping, and lighting. The northern half of South Avenue was expanded from a 30' ROW to a 53' ROW, including a bike lane, sidewalks, landscaping, and lighting. Construction is proposed to begin in January 2024 and is anticipated to last approximately 13 months. The Project is currently under review by the City of Reedley under Site Plan Review Application No. 2022-1 and Tentative Parcel Map Application 2022-2. See Figure 3-2 for the Site layout.

2.2 Project Location

The proposed project site is located within the northern portion of the City of Reedley, on the northeast corner of South Frankwood Avenue and East South Avenue. The project site is approximately 4.19 gross acres on parcel number 363-220-041. The Site is topographically flat and is bordered by agricultural land uses to the west and south and single-family homes to the north, east, and southeast. The Site is currently vacant and zoned as CN, Neighborhood Commercial, and is designated as Neighborhood Commercial by the Reedley General Plan.

2.3 Other Permits and Approvals

Other permits and approvals required for the Frankwood Commons 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 Reedley Tentative Parcel Map*
- *City of Reedley Conditional Use Permit*
- *City of Reedley 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 Rules 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 from project construction.

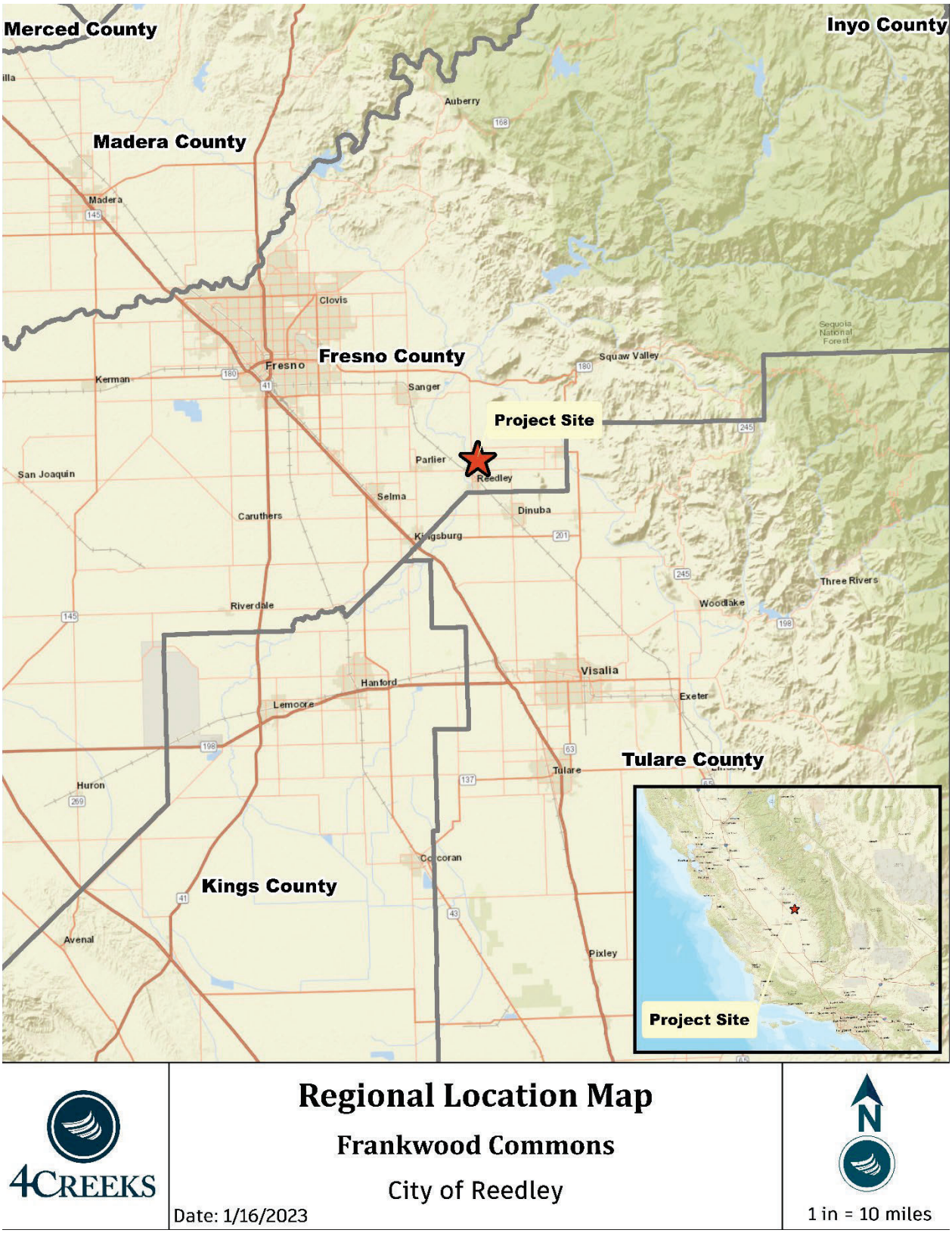


Figure 2-1. Regional Location Map

Figure 2-2. Vicinity Map

Section 3

Evaluation of Environmental Impacts

City of Reedley
1733 9th Street
Reedley, CA 93654

SECTION 3

Project Title: Frankwood Commons Commercial Village, SPR 2022-1, TPM 2022-2

This document is the Initial Study/Mitigated Negative Declaration for the proposed construction and operation of a commercial development Project on approximately 4.19 acres in the City of Reedley. The Project would also subdivide the 4.19-acre Site into two parcels. The City of Reedley will function 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 public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a Project subject to CEQA when:

(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.
(2) The initial study identifies potentially significant events, but:
   a. *Revisions in the Project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
   b. *There is no substantial evidence, in light of the whole record before the agency, that the Project as revised may have a significant effect on the environment.*

3.2 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1. **Project Title:** Frankwood Commons Commercial Village

2. **Lead Agency:** City of Reedley
1733 9th Street
Reedley, CA 93654
(559) 637-4200

3. **Applicant:** S-K Ranch Management**,** Shannon Family
Contact Person: JR Shannon
11878 Avenue 328
Visalia, CA 93291
(559) 401-2622

4. **Project Location:** Located within the northern portion of the City of Reedley, the proposed Project Site is on the northeast corner of South Frankwood Avenue and East South Avenue. The Site is topographically flat and is bordered by agricultural land uses to the west and south, and single-family homes to the north, east, and southeast. The Project Site is approximately 4.19 gross acres and is on APN 363-220-041.

5. **General Plan Designation:** Neighborhood Commercial

6. **Zoning Designation:** CN**,** Neighborhood Commercial

7. **Project Description:** The proposed Project involves the development of a commercial development Project on approximately 4.19 acres in the City of Reedley. The proposed Project includes a gas station/convenience store with a drive-through and a medical clinic. The gas station/convenience store will be approximately 5,200 square feet, while the medical clinic will be approximately 11,000 square feet. The existing and proposed zoning is CN, Neighborhood Commercial. The 2030 Reedley General Plan designates the Site as Neighborhood Commercial. The proposed land use is Neighborhood Commercial. The Project would subdivide the 4.19-acre Site into two parcels, one for each business. The Site will include 100 parking stalls and construct on-site and off-Site infrastructure improvements. These streets have already been improved by the development of surrounding homes, including new and relocated utilities. The eastern half of Frankwood Avenue was expanded from a 30' ROW to a 42' ROW and has been built out to include a bike lane, sidewalk, landscaping, and lighting. The northern half of South Avenue was expanded from a 30' ROW to a 53' ROW, including a bike lane, sidewalks, landscaping, and lighting. Construction is proposed to begin in January 2024 and will last approximately 13 months. The Project is currently under review by the City of Reedley under Site Plan Review Application No. 2022-1 and Tentative Parcel Map Application 2022-2. See Figure 3-2 for the Site layout.

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

North	Low Density Residential (City of Reedley 2030 General Plan); Currently Agricultural Land Being Developed into Single-Family Homes

South	Neighborhood Commercial, High Density Residential, Low Density Residential (City of Reedley 2030 General Plan); Currently Agricultural and Single-Family Homes
East	Low Density Residential (City of Reedley 2030 General Plan); Currently Agricultural Land Being Developed into Single-Family Homes
West	Neighborhood Commercial (City of Reedley 2030 General Plan); Currently Agricultural Land

9. **Required Approvals:** The following discretionary approvals are required for the proposed Project:

   - *City of Reedley Tentative Parcel Map*
   - *City of Reedley Conditional Use Permit*
   - *City of Reedley 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 Rules VIII, 3135, 4101, and 9510.
   - *Central Valley Regional Water Quality Control Board, SWPPP*. The proposed Project Site is within the Central Valley Regional Water Quality Control Board (RWQCB) jurisdiction. The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater from Project construction.

10. **Native American Consultation:** The State requires lead agencies to consider the potential effects of proposed Projects and consult with California Native American tribes during the local planning process to protect Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe traditionally and culturally affiliated with the geographical area of the proposed Project. Such significant cultural resources are either Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that is either on or eligible for inclusion in the California Historic Register or local historic register, or the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a) (1-2)). According to the most recent census data, California is home to 109 currently recognized Native American tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has several Rancherias, such as the Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits. Following AB 52, tribal groups that the Project can potentially impact were contacted to review the Project. No comments have been received.

    Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and Project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

11. **Parking and access:** Vehicular Access to the Project Site will be available via both Frankwood Avenue and South Avenue. The proposed development will include shared internal drives and parking consistent with retail and commercial development requirements. The Project contains a total of 100 parking spaces. A drive-thru will be attached to the convenience store. Frankwood Avenue and South Street improvements include a newly widened road, sidewalk, and landscaping. During construction, workers will utilize on-site temporary site staging areas for parking vehicles and equipment.

12. **Landscaping and Design:** The Project will have landscaping along the frontage and throughout the Site. The landscape and design plans will be required when the Project submits the building permit on the Project and will be subject to the City of Reedley.

13. **Utilities and Electrical Services:** The Project will connect to existing water and sanitary sewer lines along Frankwood Ave and South Street. Electricity will be provided by PG&E, natural gas will be supplied by SoCalGas, and telephone connections will be provided by AT&T. Stormwater will be collected on a new basin located on the single-family development to the north of the Site. The City of Reedley will provide water and sewer services. Reedley will extend other City Services (law enforcement, fire protection, etc.) to the proposed Project area upon development.

Acronyms

BMP	Best Management Practices
CARB	California Air Resources Board
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
DOC	California Department of Conservation
DHS	Department of Health Services
DWWTP	Domestic Wastewater Treatment Plant
FEIR	Final Environmental Impact Report
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FPP	Farmland Preservation Plan
FCOG	Fresno Council of Governments
ISMND	Initial Study Mitigated Negative Declaration
LAFCO	Local Area Formation Commission
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MCL	Maximum Contaminant Level
MGD	Million Gallons per Day
MMRP	Mitigation Monitoring and Reporting Program
NAHC	Native American Heritage Commission
ND	Negative Declaration
NAC	Noise Abatement Criteria
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act of 1976
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SMARA	State Surface Mining and Reclamation Act
SJVAPCD	San Joaquin Valley Air Pollution Control District
SOI	Sphere of Influence
SSJVIC	Southern San Joaquin Valley Air Pollution Control District
SWPPP	Storm Water Pollution Prevention Plan
UBC	Uniform Building Code
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Traveled
WWTP	Wastewater Treatment Plant

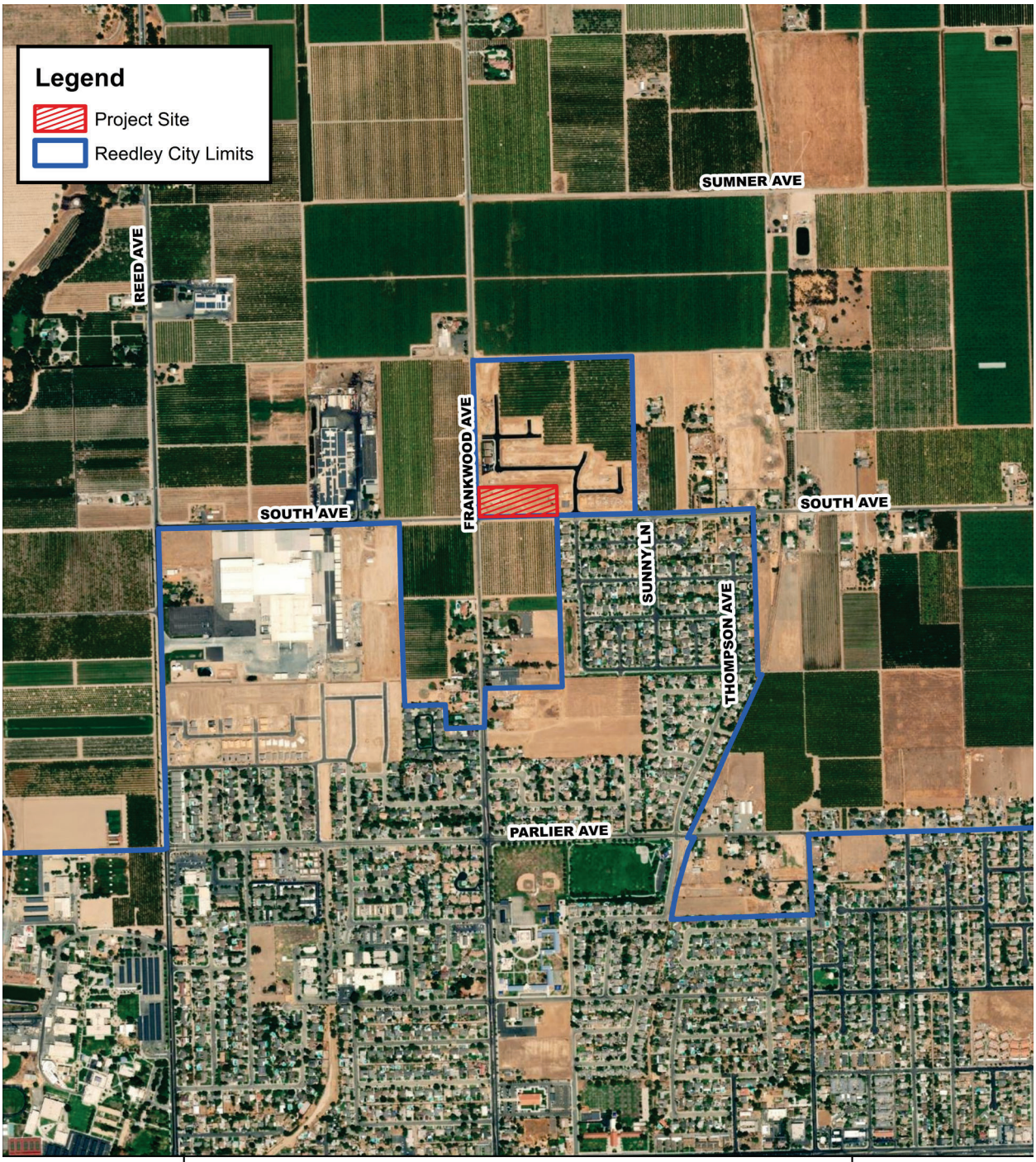


Figure 3-1. Vicinity Map

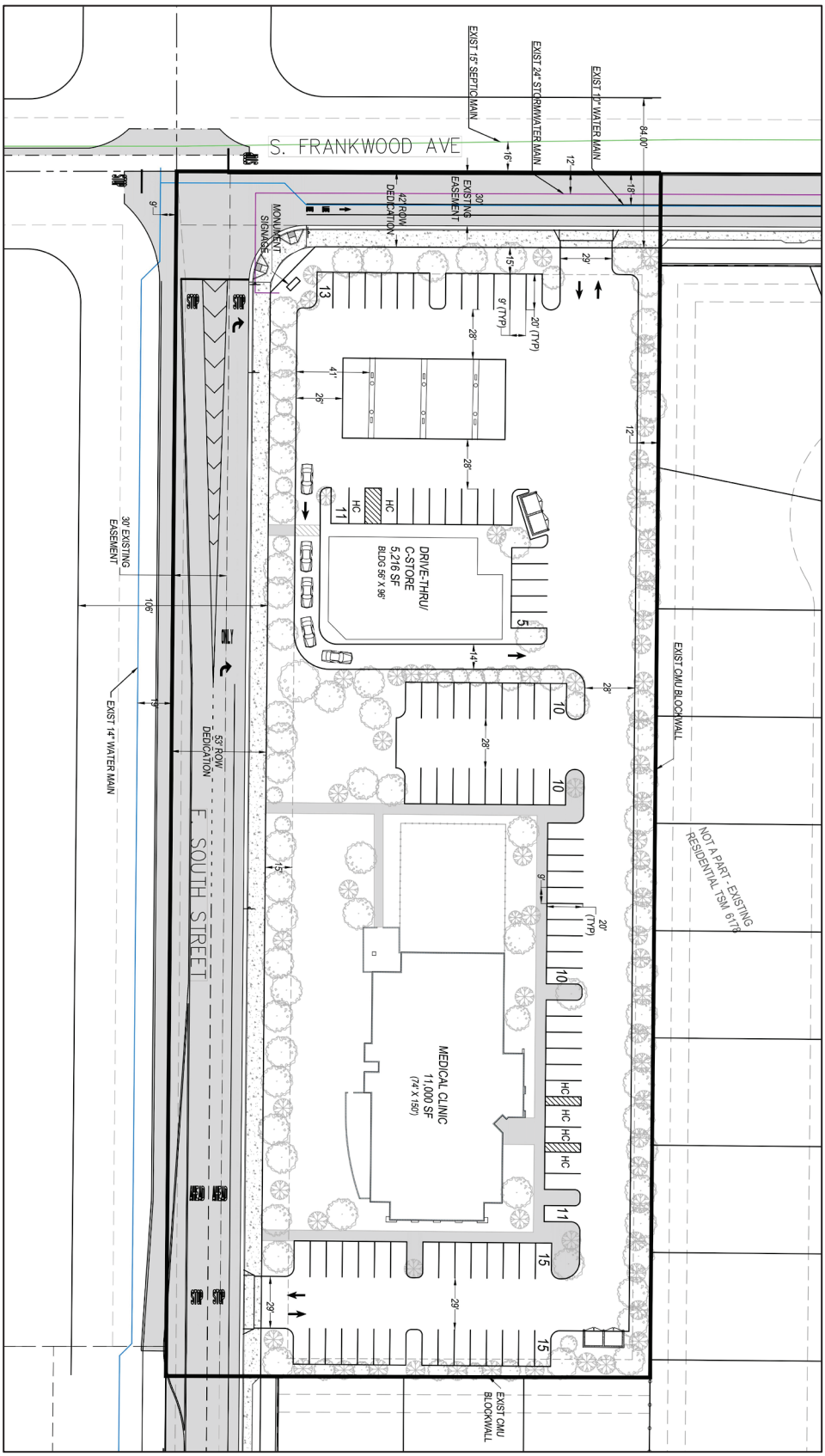


Figure 3-2. Site Plan.

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1. For purposes of this Initial Study, the following answers have the corresponding meanings:

    a. “No Impact” means the subsequent Project will not cause any additional significant effect related to the threshold under consideration which was not previously examined in the PEIR.
    b. b. “Less Than Significant Impact” means there is an impact related to the threshold under consideration that was not previously examined in the PEIR, but that impact is less than significant;
    c. “Less Than Significant with Mitigation Incorporation” means there is a potentially significant impact related to the threshold under consideration that was not previously examined in the PEIR, however, with the mitigation incorporated into the Project, the impact is less than significant.
    d. “Potentially Significant Impact” means there is an additional potentially significant effect related to the threshold under consideration that was not previously examined in the PEIR.
    e.
2. 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 referenced 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).
3. 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.
4. 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.
5. "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 Section XVII, "Earlier Analyses," may be cross-referenced).
6. Earlier analyses may be used where, pursuant to the tiering, PEIR or MIER, 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 the PEIR or another 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 the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address Site-specific conditions for the Project.

7. 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.
8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
9. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a Project's environmental effects in whatever format is selected.
10. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

3.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

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

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION WILL BE PREPARED.

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

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

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

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

Digitally signed by Ellen Moore
Date: 09/07/23

SIGNATURE DATE

Ellen Moore — PRINTED NAME

City of Reedley, Community Development Department — AGENCY

3.5 ENVIRONMENTAL ANALYSIS

The following section evaluates the impact categories and questions in the checklist and identifies mitigation measures, if applicable.

I. AESTHETICS

Except as provided in Public Resource Code Section 210999, would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☑	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway?	☐	☐	☐	☑
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the Site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

Environmental Setting

The City of Reedley has generally retained a small-town feel rooted in its historic agriculture-related character and economy. The City's primary distinct areas include its downtown commercial center, the Kings River Corridor along the western edge of the City, an evolving industrial area in the southeast portion of the City, and lower-density residential neighborhoods. The lower-density neighborhoods comprise much of the remainder of the land use within the City and contain local commercial services.

The City of Reedley General Plan does not identify any aesthetic resources within the City. However, the views of the agricultural land on the urban fringes, the Sierra Nevada Mountains to the east, and the Kings River Corridor to the west are scenic vistas in Reedley.

Sierra Nevada Mountains: The Sierra Nevada Mountain range and its foothills stretch along the east of Fresno County and are a valuable aesthetic resource. Sequoia National Park is within the stretch of the Sierra Nevada Mountains in Fresno 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 is known for its towering sequoia trees and scenic vistas. The

Sierra Nevada Mountains are approximately 20 miles east of the proposed Project Site, but views of the mountains are not visible on most days due to poor air quality.

Kings River Corridor: The Kings River corridor provides the most significant open space/natural scenic values within/adjacent to the City. The City and Fresno County have planned to manage land use along the river to protect its open space and biological resources values over time. The corridor is a rich, mature riparian vegetation habitat along both of its banks. The River contains a recreation trail along one side. The Corridor is about one mile away and is not visible from the Site.

The following photos demonstrate the aesthetic character of the Project area. As shown, the proposed Project Site is in a relatively flat, undeveloped area.

Photo 1: Southeastern Site boundary (View northwest). Source: Google Street View 2023

Photo 2: Northwestern Site boundary (View southeast). Source: Google Street View 2023

Photo 3: Southwest corner (View northeast). Source: Google Street View 2023

Photo 4: Western Site boundary (View east). Source: Google Street View 2023

Regulatory Setting

State Scenic Highways: Caltrans implemented the State Scenic Highway Program to preserve the aesthetic quality of specific highway corridors. Designated highways included in this program are scenic highways. A highway is 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 landscape views. No designated State Scenic Highways or highways are eligible for designation within the City of Reedley. The nearest Scenic Highway is Highway 180, seven miles north of the Project Site.

Light and Glare: A range of daytime and nighttime glare sources are typical in cities, including Reedley. Daytime sources of glare typically include reflection of the sun off of buildings, car windshields, other

highly reflective glass or metal surfaces, and off of natural surfaces such as lakes or rivers. All of these sources of daytime glare occur within the City.

Nighttime lighting is the primary source of glare that adversely affects nighttime views and creates sky glow. Typical sources of nighttime glare include high-intensity lighting at playfields, commercial and industrial facilities lighting, parking lot lighting, street lighting, and vehicle headlights.

Reedley Municipal Code/Design Standards: Title 10, Zoning Regulations, contained in the Reedley City Municipal Code (City of Reedley 2012) (hereinafter "Municipal Code") includes a range of regulations that guide development in a manner that protects and enhances the visual quality of urban development. For example, development standards for individual types of land uses typically address lighting, signage, landscaping requirements, and building heights to manage and enhance aesthetic effects of new development. Standards for architectural design are also provided for specific types of land use development. The Zoning code provides regulations for this purpose.

Chapter 19, Site Plan Review, of Article 10, Zoning Regulations, establishes a development review procedure for some residential and all commercial and industrial uses. The Site Plan Review process is established in part:

"The purposes of the Site plan review process is to enable the planning director to make a finding that the proposed development is in conformity with the intent and provisions of this title and to guide the building official in the issuance of building permits. More specifically, Site plan review is provided to ensure that structures, parking areas, walks, landscaping and street improvements are properly related to their sites and to surrounding sites and structures; to prevent excessive grading of the land and creation of drainage hazards; to prevent the indiscriminate clearing of property and the destruction of trees and shrubs of ornamental value; to avoid unsightly, inharmonious, monotonous and hazardous Site development; and to encourage originality in Site design and development in a manner which will enhance the physical appearance and attractiveness of the community. The Site plan review process is intended to provide for expeditious review of environmental impact assessments required by official policy of the city."

City of Reedley General Plan: The City of Reedley 2030 General Plan *Land Use Element* includes the following aesthetic goals and policies that are intended to protect the City's aesthetic resources and are relevant to the proposed Project.

Community Character/Identity

- Goal LU 2.4A: Preserve and enhance Reedley's unique character and achieve an optimal balance of residential commercial, industrial, public, and open space land uses.
- Goal LU 2.4C: Maintain and enhance Reedley's small-town characteristics.
  - Policy LU 2.4.1: To facilitate compatibility with surrounding uses and overall character of the City of Reedley develop design standards for structures, landscaping, and parking areas.

Urban Growth Management

- Goal LU 2.5A: Support agricultural industries within and surrounding the City by establishing urban growth management policies which seek to minimize the premature conversion of productive agricultural land to more urbanized uses.
- Goal LU 2.5B: Minimize leap-frogging, low density, automobile dependent development beyond the edge of service and employment areas, or the creation of peninsula development greater than ¼ mile from existing urban uses.
  - Policy LU 2.5.1-12: These policies promote conservation of agricultural land within the SOI until such time as it is needed for development.

Land Use Designations

- Goal LU 2.7L: - Provide for the compatibility of commercial land uses with surrounding land uses.
  - Policy LU 2.7.24: Ensure that all commercial land uses are developed and maintained in a manner complementary to and compatible with adjacent residential land uses, to minimize interface problems with the surrounding environment, and to be compatible with public facilities and services. As part of the City's Project review process, major emphasis will be given to Site and building design in order to ensure and/or preserve functionality and community aesthetics.
    a) Development Projects shall appropriately interface with adjacent properties.
    b) Shopping Centers shall embrace a unified building, landscaping, and signage design.
    c) Building facades with visible sides of buildings shall not develop with featureless, "blank walls".
  - Policy LU 2.7.23: Future commercial development in the planning area shall be well designed to respect neighborhood scale and traditional architectural design. Toward that end, commercial development will be reviewed utilizing the following design standards:
    a) Parking space requirements shall be minimized for commercial developments. Parking lots should be segmented to minimize the impact of parking on the streetscape. In particular, parking should be located to the rear or to the side of commercial and office buildings.
    b) Incorporate interface design standards (e.g.; setbacks, fencing) into each residential and commercial zone district to ensure compatibility.

c) Commercial development shall be designed to facilitate pedestrian and bicycle access and function, featuring outdoor seating, pedestrian plazas and wide, shade-covered walkways.
d) Landscaping, particularly shade trees and drought tolerant plants, shall be maximized in all commercial developments.

- Policy LU 2.7.24: Ensure that all commercial land uses are developed and maintained in a manner complementary to and compatible with adjacent residential land uses, to minimize interface problems with the surrounding environment, and to be compatible with public facilities and services. As part of the City's project review process, major emphasis will be given to site and building design in order to ensure and/or preserve functionality and community aesthetics.
    a) Development projects shall appropriately interface with adjacent properties.
    b) Shopping Centers shall embrace a unified building, landscaping and signage design.
    c) Building facades with visible sides of buildings shall not develop with featureless, "blank walls".
    d) Adequate screen roof-mounted mechanical equipment, and ensure that such equipment adhere to noise standard set forth in the General Plan Noise Element.
- Policy LU 2.7.26: Future commercial development in the planning area shall be well-designed to respect neighborhood scale and traditional architectural design. Towards this end, commercial development will be reviewed in keeping with the following design standards:
    a) Zoning ordinance parking space requirements shall be minimized for commercial developments. Parking lots should be segmented to minimize the impact of parking on the streetscape. In particular, parking should be located to the rear or to the side of commercial and office buildings.
    b) Incorporate interface design standards (e.g. setbacks, fencing) into each residential and commercial zone district to ensure compatibility.
    c) Commercial development shall be designed to facilitate pedestrian and bicycle access and function, featuring outdoor seating, pedestrian plazas and wide, shade-covered walkways.
    d) Landscaping, particularly shade trees and drought tolerant plants, shall be maximized in all commercial developments.
- Policy LU 2.7.38: Neighborhood Commercial uses shall be designed to be compatible with adjacent residential uses by addressing scale, height and architectural.

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 landscapes for the benefit of the public. The City of Reedley General Plan does not contain any scenic vistas. The Reedley General Plan EIR found no significant impacts on scenic vistas from the future buildout of the General Plan, which includes the Project area. The Project would replace existing agricultural views from some residents of the City; however, the future development surrounding the Site would make these views trivial. The views of the Sierra Nevada Mountains would essentially 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: No Officially Designated State Scenic Highways exist within the City of Reedley. Highway 180 is the nearest Eligible State Scenic Highway, located approximately seven miles north of the Project Site. Significant distance between the Project Site and Highway 198 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 an urbanized area. The proposed Project would not conflict with applicable zoning or regulations governing scenic quality. Recent residential development in the immediate area surrounding the Project Site has replaced agricultural fields, so the Project would not degrade the existing visual character or quality of the surrounding environment. 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 include businesses' interior lighting, parking area lighting, street lighting, and security lighting. All street, landscape, and parking area lighting will be consistent with the City's lighting standards that were developed to minimize excessive light and glare impacts. Additionally, the Project would comply with the City's Zoning Regulations 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 Site, all lighting will be consistent with adjacent residential land uses and the City's lighting standards. The impacts are *less than significant.*

II. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☑	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☑
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned timberland Production (as defined by Government Code section 51104(g)?	☐	☐	☐	☑
d) Result in the loss of forestland or conversion of forest land to non-forest use?	☐	☐	☐	☑
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☑	☐

Environmental Setting

Agriculture is a vital component of the City of Reedley'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 Statewide 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 significantly reduced property tax assessments. The California Department of Conservation oversees the California Land Conservation Act; however, local governments are responsible for determining specific allowed uses and enforcing the contract. The City of Reedley General Plan states that the City encourages using Williamson Act contracts on parcels outside the urban development boundary.

California Farmland Mapping and Monitoring Program (FMMP): The California Department of Conservation (DOC) implemented the FMMP to conserve and protect agricultural lands within the State. The land included in this program is 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 before classification and can produce sustained yields.
- ***Farmland of Statewide Importance*** has also been used for irrigated production four years before classification and is only slightly poorer quality than Prime Farmland.
- ***Unique Farmland*** has been cropped in the four years before 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 last 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.

Fresno County General Plan and Zoning: In the *Fresno County 2000 General Plan*, Reedley is designated as a Community Plan Area, with all lands surrounding the City designated by the County as Agriculture, and County agricultural zoning regulations regulate the land use. Allowed uses within the Agriculture land use designation include production of crops and livestock, and the location of necessary agriculture commercial centers, agricultural processing facilities, and certain nonagricultural activities. The exception is the Kings River Regional Plan Area, located in the city's western portion along the river corridor.

City of Reedley General Plan: The *Land Use Element* of the City's General Plan includes the following agricultural resource goals and policies that are potentially applicable to the proposed Project:

Urban Growth Management

- Goal LU 2.5A: Support agricultural industries within and surrounding the City by establishing urban growth management policies which seek to minimize the premature conversion of productive agricultural land to more urbanized uses.
- Goal LU 2.5B: Minimize leap-frogging, low density, automobile dependent development beyond the edge of service and employment areas, or the creation of peninsula development greater than ¼ mile from existing urban uses.
- Goal LU 2.5C: Facilitate orderly transition from rural/agricultural uses to urban land uses.
  - Policy LU 2.5.2: Development standards shall incorporate measures to protect and preserves agricultural land.
  - Policy LU 2.5.7: Require contiguous development within the Sphere of Influence unless it can be demonstrated that the development of contiguous property is infeasible.
  - Policy LU 2.5.8: Implement an annexation policy that is based on annexing land for residential development only when at least 80 percent of the residentially designated land inside city limits is developed.
  - Policy LU 2.5.12: New urban development should occur in an orderly manner with initial development occurring on the available undeveloped properties which are closer to the built-up area.

The *Conservation, Open Space, Parks, and Recreation Element* of the City's General Plan includes the following agricultural resource goals and policies that are potentially applicable to the proposed Project:

Agriculture

- Goal COSP 4.3A: To preserve as long as possible the prime farmland, farmland of statewide importance and farmland of local importance within the GPU Sphere of Influence.
- Goal COSP 4.3B: To provide a greenbelt around the City's perimeter to maintain the physical separation between the City of Reedley and the Cities of Dinuba and Parlier as well as existing agricultural uses within the County of Fresno but outside the City's Sphere of Influence.
  - Policy COSP 4.3.1: Support the efforts of the County of Fresno and agricultural and community stakeholders to preserve and protect farmlands outside the centralized core of the City.
  - Policy COSP 4.3.2: Maintain a 20-acre minimum parcel size for agriculturally designated parcels to encourage viable agricultural operations and to prevent parcellation into rural residential or ranchette developments.
  - Policy COSP 4.3.3: The City shall prepare and adopt a Farmland Preservation Plan (FPP). This plan shall include a set of policies, standards, and measures to avoid the unnecessary conversion of agricultural lands. The FPP shall include:
    a) The City shall strive to protect agriculturally designated areas, and direct urban growth away from productive agricultural lands into urbanized or underdeveloped portions of the City.

b) The City shall strive to collaborate with the Fresno County Local Area Formation Commission (LAFCo), Fresno County and land owners to encourage minimum parcel sizes of 20 acres or more for land designated for agriculture and/or evidence of commercial agricultural use prior to entering into new Williamson Act contracts.

c) The City shall not protest the renewal of Williamson Act Contracts with regard to land located within the City's SOI, but not adjacent or in close proximity to the City's current boundary, where the land's minimum parcel size is at least 20 acres and the land owner has provided evidence satisfactory to the City that the land is currently being used for commercial agricultural operations.

d) The City shall support the efforts of public, private, and non-profit organizations to preserve Prime Farmland, Unique Farmland or Farmland of Statewide Importance located in Fresno County through the dedication of conservation easements and the preservation of range land held as environmental mitigation.

e) The City shall actively collaborate with landowners, cities, state and federal agencies, colleges, universities, stakeholders, and community based organizations to continue to expand agricultural preservation in the surrounding Fresno County area.

f) The City shall discourage public agencies from locating facilities, especially schools, in existing agricultural areas.

g) The City shall encourage the voluntary merger of antiquated subdivision lots that conflict with adjacent agricultural uses.

- The FPP shall include the following implementation measures:
  a) A provision designating the Community Development Department as the department responsible for the preparation and implementation of the FPP, once adopted and directing the Department to prepare annual reports to the City Council describing progress made toward the preparation, adoption and implementation of the final FPP.
  b) The creation of a community outreach program to encourage current agricultural landowners' continued participation in programs that preserve farmland, including the Williamson Act, conservation easements, and USDA-funded conservation practices.
  c) The City shall manage extension of public utilities and infrastructure to avoid extending them into agricultural areas before those areas are committed to conversion of urban uses.

- Policy COSP 4.3.4: the City shall develop and consider the adoption of a program that shall require new development within the SOI to fund farmland preservation efforts. The goal of this program is to preserve designated Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (together "Farmland") that otherwise runs the risk of being converted to urbanized development. This program shall act as a mitigation program in response to the necessary agricultural land conversion that occurs as a result of the City's expansion into its SOI. The City shall not support the annexation of lands in excess of a total of 500 acres within

the City's existing SOI until this program, or a program that accomplishes the same goals, has been adopted and other actions and approvals necessary to the implementation of the program have been completed. Among other provisions, the program shall include the following evaluation and performance requirements:

a) Program Goal: As Prime Farmland, Unique Farmland, and Farmland of Statewide Importance within the City's SOI is converted to urban uses, secure the permanent preservation of other Prime Farmland, Unique Farmland, and Farmland of Statewide Importance within Fresno County on a 1 for 1 basis.

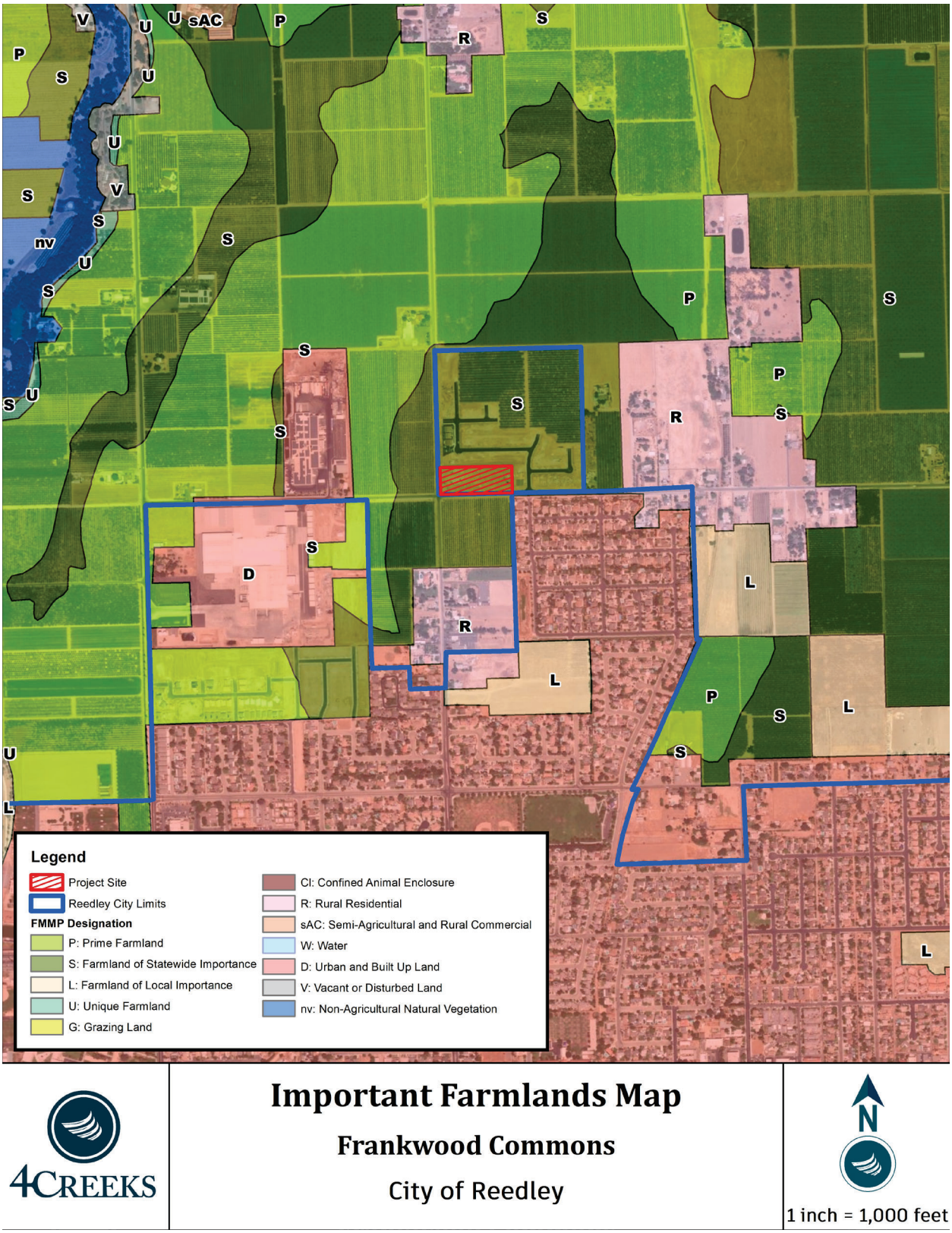


Figure 3-3: Important Farmlands Map

Discussion

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

Less than significant: The DOC FMMP designated the proposed Site as Farmland of Statewide Importance. The City of Reedley General Plan, *Land Use Element*, promotes increases in residential and commercial density ranges to accommodate community expansion, anticipated population growth, and minimize premature agricultural land conversion. The City's General Plan has the Project Site planned for commercial development. Conservation of agricultural lands within the current Sphere of Influence (SOI) has already been studied and mitigated in the General Plan EIR. Additionally, the proposed Project's size will not significantly alter the amount of land preserved for agriculture and is directly adjacent to newly built single-family home residences. The proximity of the proposed Project Site to urbanized development would not promote the extension of infrastructure that would significantly impact agricultural resources in the area. The Project will follow all 2030 General Plan policies to reduce potential impacts. The impact is *less than significant.*

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

No Impact: The proposed Project Site is not zoned for agricultural use or under a Williamson Act Contract. The existing zoning designation is Neighborhood Commercial, and the proposed zoning is Neighborhood Commercial. 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 no forest land is present. 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 the Public Resource Code or General Code, will occur as a result of the Project, and there will 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 designated as Farmland of Statewide 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. The Project does not include any features that could result in forestland conversion to non-forest use. Therefore, the impact is *less than significant.*

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☑	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☑	☐

Environmental Setting

Air pollution is directly related to regional topography. Topographic features can either stimulate the movement of air or restrict air movement. California is divided into regional air basins based on topographic air drainage features. The proposed Project Site is within the San Joaquin Valley Air Basin (SJVAB), which the Sierra Nevada Mountains border to the east, Coastal Ranges to the west, and the Tehachapi Mountains to the south. The mountain ranges surrounding the SJVAB serve to restrict air movement and prevent the dispersal of pollution. Table 3-1 shows that the SJVAB is 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 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 significant sources of pollution, and promulgating regulations. Under CAA, the NCCAB is identified as an attainment area for all pollutants.

California Clean Air Act – The California Air Resources Board coordinates and oversees California's State and Federal air pollution control programs. As part of this responsibility, the California Air Resources Board (CARB) 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 San Joaquin Valley Air Pollution Control District (SJVAPCD) jurisdiction. 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 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 the general welfare. The U.S. EPA revoked the national 1-hour ozone standard on June 15, 2005, and the annual PM_{10} standard on September 21, 2006, when a new $PM_{2.5}$ 24-hour standard was established.

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (03)	1 Hour	0.09 ppm (180 µg/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/m3		--		
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)		--	--	

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Nitrogen Dioxide (NO_2) [8]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	--	Gas Phase Annual Chemiluminescence
	Arithmetic Mean	0.030 ppm (57 µg/m^3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		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/m^3	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/m^3		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standard		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	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 equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each Site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each Site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.
9. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each Site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
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 enforces 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 that include construction, demolition, excavation, extraction, or other earth-moving activities as defined by Regulation VIII (Described below) must submit a Dust Control Plan and required fees to mitigate dust-related impacts.
- **Rule 4101:** Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color or have the potential to obstruct visibility.
- **Rule 4601:** Architectural Coatings. Rule 4601 limits VOC emissions from architectural coatings by regulating the storage, cleanup, and labeling of architectural coatings.
- **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 a 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 of PM10 and NOX emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development Projects 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 under Rule 9510's requirements.
- **Regulation VIII:** Fugitive PM10 Prohibitions. Regulation VIII comprises eight rules that aim to limit PM10 emissions by reducing fugitive dust. These rules contain required management practices to limit PM10 emissions during construction, demolition, excavation, extraction, 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?

Less than Significant 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 regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in the City of Reedley 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. CalEEMod calculated the construction-related emissions from these activities. The full CalEEMod Report can be found in Appendix A. As shown in Table 3-4 below, 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 Construction [2]	**1.98**	**0.18**	**0.0034**	**1.69**	**0.16**	**0.11**
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. CalEEMod calculated the operational emissions from these factors. 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 Operations[2]	**5.99**	**1.15**	**0.0086**	**1.06**	**0.79**	**0.22**

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, and the Project will follow all Rules set by the SJVAPCD, the Project would not conflict with or obstruct the implementation of an applicable air quality plan. There is *a less than significant 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 on air quality in Section 1.8, "Thresholds of Significance – Cumulative Impacts," in its 2015 Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). When developing its significance thresholds, the SJVAPCD considered basin-wide cumulative impacts on air quality. 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 on the northern and eastern boundary of the Site as well as the homes southeast of the Project Site, are the closest sensitive receptors. Table 1-1 of the California Air Resources Board Air Quality and Land Use 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 CN zone. The gas station would be the only source potentially exposing sensitive receptors to substantial pollutant concentrations. For a gasoline station, the Handbook recommends a buffer distance of 300 feet from gasoline dispensing facilities with a throughput of 3.6 million gallons per year or more and 50 feet from a typical neighborhood station. The project's gasoline station's anticipated size will fall in the typical neighborhood station category, and the nearest sensitive receptors would be more than 50 feet away. The gas station would also be subject to separate district permitting under SJVAPCD Rule 4622.SJVAPCD developed this rule 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 will 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 the impacts would be *less than significant.*

IV. BIOLOGICAL RESOURCES

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

Discussion for this section originates from a literature search on the California Natural Diversity Database (CNDDB) to identify sensitive biological resources, provide Project impact analysis, and suggest mitigation measures.

Environmental Setting

The proposed 4.19-acre Project Site is currently vacant and was formerly agricultural land. The site is on Parcel Number (APN) 363-220-041. The Project Site is in the San Joaquin Valley, a region that has experienced intensive agricultural disturbances and urban development in recent decades. This parcel is in the United States Geological Survey Reedley 7.5-minute quadrangle in Section 14, Township 15 South, Range 23 East, Mount Diablo base and meridian at approximately 350 feet above mean sea elevation level. The Site is in the northernmost portion of the City of Reedley and is surrounded by agricultural land uses (orchards) to the west and south and single-family homes to the north, east, and southeast. South

Frankwood Avenue parallels the western boundary, and East South Avenue borders the southern edge of the proposed Project Site. A four-way intersection is located on the southwest corner of the boundary. The proposed Project Site is currently vacant, heavily disturbed, and contains no vegetation due to past soil disturbance on the lot.

The physical conditions on the Site reflect decades of heavy use and ground disturbance and contain one habitat type: ruderal/developed. There are no native plant communities present on the Site, and the area is generally open with some ruderal vegetation on the edges of the Project Site. One soil type was identified on the Site: Exeter loam, with 0 to 2 percent slopes. This soil type is well drained with a medium runoff class and generally had no hydric soil rating; only minor components were recorded to have a hydric soil rating. Soils with a hydric soil rating tend to pond water and form vernal pools, which may serve as a habitat for several sensitive species. The soil type on this Site may form water-restrictive layers (duripans) that may promote water ponding to create vernal pools; however, the history of heavy ground disturbance would prevent the soil from exhibiting native soil characteristics that would impact the state of biological resources on the Site.

To assess potential impacts on biological resources that are present on the Site, the CNDDB was used to create a list of species that could occur on or near the Project Site. Based on the data gathered from the CNDDB, seven special status species have been documented to appear in the area and have the potential to occur on or near the Project Site, depending on habitat requirements. The animal species are the Burrowing owl *(Athene cunicularia)*, Valley elderberry longhorn beetle *(Desmocerus californicus dimorphus)*, Pallid bat *(Antrozous pallidus)*, and Western pond turtle *(Emys marmorata)*. The plant species of concern are Sanford's arrowhead *(Sagittaria sanfordii)*, San Joaquin adobe sunburst *(Pseudobahia peirsonii)*, and California satintail *(Imperata brevifolia)*. Additionally, analyzing the physical conditions of the Project Site helped determine whether there was potentially suitable habitat for special-status species that have historically been observed within or surrounding the Project area. Based on on-site examination through aerial photographs, the Site appears to be a generally unsuitable habitat for special status animals and a completely unsuitable habitat for special status plants. There is a potentially suitable habitat for the burrowing owl, as they inhabit open, dry, sparsely vegetated areas and have been found in sites adjacent to intensive agriculture and urban development. Suitable habitat for the special status plants with known occurrences near the Site includes wetland-riparian, valley grasslands, foothill woodlands, coastal-sage brush, and chaparral communities (CalFlora, 2023), none of which are naturally present at the Site.

Other species that are not special status but may still occur on or near the Project Site include the Great blue heron (*Ardea herodias)*, Morrison bumble bee (*Bombus morrisoni),* San Joaquin long-tailed weasel (*Mustela frenata xanthogenys),* the Hoary bat (*Lasiurus cinereus*), and the Yuma myotis (*Myotis yumanensis*). Due to the lack of suitability of the Site for both foraging and habitat, it is unlikely that these species would occur on the Project Site.

Species Name	Federal Listing	State Listing	CDFW Status	CA Rare Plant Rank
Birds				
Burrowing Owl - *(Athene cunicularia)*	None	None	Species of Special Concern (SSC)	-
Invertebrates				
Valley elderberry longhorn beetle - *(Desmocerus californicus dimorphus)*	Threatened	None	-	-
Mammals				
Pallid bat- (*Antrozous pallidus*)	None	None	SSC	-
Reptiles				
Western pond turtle – *(Emys marmorata)*	None	None	SSC	-
Plants				
Sanfords arrowhead – *(Sagittaria sanfordii)*	None	None	-	1.B.2
San Joaquin adobe sunburst - *(Pseudobahia peirsonii)*	Threatened	Endangered	-	1.B.1
California satintail - *(Imperata brevifolia)*	None	None	-	2.B.1

Table 3-6. Special Status Species Records Search Findings.

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 "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 under regulations prescribed by the Secretary of the Interior. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs. The name of the act is misleading, as it covers almost all birds native to the United States, even those that are non-migratory. 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) and 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 and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), making killing birds or their eggs unlawful.

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 filled 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 taking 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 according to Section 2080 of CESA is required from the CDFG.

City of Reedley General Plan: The City of Reedley 2030 General Plan *Conservation, Open Space, Parks, and Recreation Element* includes the following goals and policies intended to protect the City's biological resources and are relevant to the proposed Project.

Conservation and Open Space

- Goal COSP 4.13C: As feasible, preserve native vegetation and protected wildlife, habitat areas, and vegetation, through avoidance, impact mitigation, and habitat enhancement.
  - Policy COSP 4.14.1: As part of the environmental review of new development projects:
    - **a)** Biological studies shall be prepared to assess habitat value when determined appropriate by the Community Development Department.
    - **b)** Mitigation shall be applied to assure that degradation of habitat or impacts to sensitive species is reduced or eliminated.
    - **c)** Input will be sought from agencies and individuals with expertise in biological resources, including the California Department of Fish and Game, California Water Quality Control Board, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and U.S. Environmental Protection Agency.

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: There are several species identified as 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) that have been historically documented near the Project Site, but the Site conditions do not currently provide suitable habitat for most of these species. The area is undeveloped, highly disturbed by agricultural equipment, and lacks vegetation, so there is a low potential for special-status animal or plant species on the Site. However, burrowing owls (Athene cunicularia) may occur on the Project Site, as they inhabit primarily dry, open areas with sparse vegetation and are listed as a Species of Special

Concern by the CDFW. Additionally, adjacent agricultural fields contain pockets of potentially suitable nesting bird habitats proximate to the Project Site. Still, due to the lack of trees on the Site, nesting habitat for birds inhabiting trees is absent on the Project Site itself. Preconstruction Surveys and Biological Monitoring for the burrowing owl are recommended before ground disturbance activities in addition to timing construction outside of the nesting season and avoiding active nests. With the implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3, 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. The proposed project's development 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 direct removal, filling, hydrological interruption, or other means?

No Impact: No vernal pools, wetlands, jurisdictional water features, or nexus to the Waters of the United States were observed on the property. Therefore, the proposed Project would have *no impacts* on State or federally-protected wetlands.

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 and the size of the development, 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 protects 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 Plans, Natural Community Plans, Conservation Plans, 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: Pre-construction Surveys.
Active raptor nests are protected by the California Fish and Game code Section 3503.5 and the Migratory Bird Treaty Act (MBTA). For this reason, a pre-construction raptor survey is recommended to determine if active nests, specifically for the burrowing owl, are present on the Site. The survey should be conducted by a qualified biologist no more than 30 days before the onset of construction activities, but preferably within 10 days prior to the start of construction. The survey area will encompass the Site and accessible surrounding lands that are considered suitable for nesting birds.

Mitigation Measure BIO-2: Construction Timing.
It is recommended to perform construction activities outside the bird nesting season (February 1 to August 31). If Project activities are proposed during the nesting season, it is recommended that the Project Site or environmental footprint of the Project be surveyed by a qualified biologist for nesting birds to avoid any adverse impacts leading to nest failure or abandonment. If construction activities are proposed to occur during the non-breeding season (September-January), a survey is not required, and no further studies are necessary.

Mitigation Measure BIO-3: Avoidance of Active Nests.
If the nests are found and considered to be active, construction activities should not occur within 500 feet of the nests until the young have fledged or a qualified biologist has determined that the nest is no longer active. The biologist will identify a suitable construction-free buffer around the nest, which will be identified with flagging or fencing and will be maintained until the biologist has confirmed that the young have fledged and can forage independently. All nests 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.

V. CULTURAL RESOURCES

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

Environmental Setting

The lands within the City of Reedley have a long history of human settlement, particularly by the Southern Valley Yokut Native Americans. The City was the Site of the Wechikit/Wechikit Yokuts. The Yokut tribes contained a large population throughout the San Joaquin Valley until the mid-to-late 1800's when the railroad system brought European settlers to the area. The extensive railroad system allowed the proliferation of commercial agriculture throughout the Valley. The City was named after Civil War veteran Thomas Law Reed in 1884, who began farming throughout modern-day Reedley on over 2,000 acres.

According to the Southern San Joaquin Valley Archaeological Information Center, 30 recorded cultural resources are found within a 1-mile radius of the City. Four sites are Native American archaeological sites; the rest are historic sites and buildings. Two sites, the Reedley Opera House and the Reedley National Bank are on the National Register of Historic Places and the California Register of Historic Resources. Neither of these listed historic resources is near the proposed Project Site.

Records Search: A Cultural Records Search (Appendix C) was completed by the Southern San Joaquin Valley Information Center (SSJVIC) on February 14, 2023. The search included known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest.

The records search results indicated that no previous cultural resource studies were completed within the Project area. There has been one cultural resource study conducted within a one-half-mile radius. According to the search, there are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, the California Inventory of Historic Resources, or the California State Historic Landmarks.

Regulatory Setting

This report defines "cultural resources" as prehistoric or historical archaeological sites and historical objects, buildings, or structures. Under 36 Code of Federal Regulations (CFR) §60.4, "historical" in this report applies to cultural resources at least 50 years old. The significance or importance of a cultural resource is dependent upon whether the resource qualifies for inclusion at the local level in a local register of historical resources, at the state level in the California Register of Historical Resources (CRHR), or at the federal level in the National Register of Historic Places (NRHP). Cultural resources that are determined to be eligible for inclusion in the CRHR are called "historical resources" (California Code of Regulations [CCR] 15064.5[a]). Under this statue, the determination of eligibility is partially based on the consideration of the criteria of significance as defined in 14 CCR 15064.5(a)(3). Cultural resources eligible for the NRHP are deemed "historic properties."

National Historic Preservation Act: The National Historic Preservation Act was adopted in 1966 to preserve historical 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 Environmental Quality Act: According to CEQA, a historical resource is listed in, or determined to be eligible for listing in, the CRHR. In addition, a resource included in a local register of historical resources or identified as significant in a local survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1. Historical resources may include, but are not limited to, "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically or archaeologically significant" (PRC §5020.1[j]).
CEQA details appropriate measures for evaluating and protecting cultural resources in §15064.5 of the CEQA Guidelines. According to CEQA guidelines §15064.5 (a)(3), the criteria for listing on the CRHR includes the following:

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

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

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

Protection of cultural resources within California is additionally regulated by PRC §5097.5, which prohibits the destruction, defacing, or removal of any historic or prehistoric cultural features on land under the jurisdiction of State or local authorities.

Health and Safety Code, Section 7050.5: Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped near discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission (NAHC). The disposition of Native American burials falls within the jurisdiction of the NAHC. CEQA Guidelines (Public Resources Code Section 5097) specify the procedures to be followed when discovering human remains on non-federal land.

City of Reedley General Plan: The City of Reedley General Plan *Conservation, Open Space, Parks, and Recreation Element* includes the following goals and policies about cultural and historic resources:

Cultural Resources

- Goal COSP 4.14A: Protect the cultural heritage of Reedley.
  - Policy COSP 4.14.1: Archaeological and historical resources shall be protected and preserved to the maximum extent feasible.
  - Policy COSP 4.14.2: Preserves, rehabilitates, or restores architecturally significant historic buildings that are capable of viable use.
  - Policy COSP 4.14.3: Identify historic resources through historic landmark markers.
  - Policy COSP 4.14.4: Protect significant historical and archaeological resources in accordance with the California Environmental Quality Act.
  - Policy COSP 4.14.5: Update the City of Reedley inventory of historic and archaeological resources to determine sites or buildings of local, State, or Federal significance.

Fresno County General Plan (2000): The Fresno County General Plan includes the following goals and policies about the conservation of cultural and historic resources:

- Policy OS-J.1: The County shall require that discretionary development Projects, as part of any required CEQA review, identify and protect important historical, archeological, paleontological, and cultural sites and their contributing environment from damage, destruction, and abuse to the maximum extent feasible. Project-level mitigation shall include accurate Site surveys, consideration of Project alternatives to preserve archeological and historic resources, and provision for resource recovery and preservation when displacement is unavoidable.
- Policy OS-J.2: The County shall, within the limits of its authority and responsibility, maintain confidentiality regarding the locations of archeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.
- Policy OS-J.3: The County shall solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or sites of cultural importance.
- Policy OS-J.4: The County shall maintain an inventory of all sites and structures in the County determined to be of historical significance (Index of Historic Properties in Fresno County).
- Policy OS-J.5: The County shall support the registration by property owners and others of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark).

- Policy OS-J.7: The County shall use the State Historic Building Code and existing legislation and ordinances to encourage preservation of cultural resources and their contributing environment.
- Policy OS-J.8: The County shall support efforts of other organizations and agencies to preserve and enhance historic resources for educational and cultural purposes through maintenance and development of interpretive services and facilities at County recreational areas and other sites.
- Policy OS-J.9: In approving new development, the County shall ensure, to the maximum extent practicable, that the location, siting, and design of any Project be subordinate to significant geologic resources.
- Policy OS-J.10: The County shall encourage property owners to enter into open space easements for the protection of unique geologic resources.

Implementation Programs

Program OS-J.A: The County shall adopt and implement an ordinance to protect and preserve significant archaeological, historical, and geological resources. The ordinance shall provide for implementation of applicable development conditions, open space easements, tax incentives, related code revisions and other measures as needed. (Policy OS-J.1)

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 archaeologists had systematically surveyed the Project area before the initial study, or whether the region of the field Project was known to contain archaeological sites and to be thereby archaeologically sensitive.

The records search results indicated that no previous cultural resource studies were completed within the Project area. According to the search, there are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks. There has been one cultural resource study conducted within a one-half-mile radius.

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. Implementing Mitigation Measures CUL-1 and CUL-2 will ensure that impacts on 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: No known archaeological resources are located within the Project area. Implementing Mitigation Measures CUL-1 and CUL-2 will ensure that the 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: No known human remains are buried in the Project vicinity. If human remains are unearthed during development, there is a potential for a significant impact. As such, implementation of Mitigation Measure CUL-2 will ensure that impacts remain *less than significant with mitigation incorporation.*

Mitigation Measures for Cultural Resources

Mitigation Measure CUL-1: Construction shall stop near the find if previously unknown resources are encountered before or during grading activities. A qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavating the finds and evaluating the discoveries following Section 15064.5 of the CEQA Guidelines and the County's General Plan.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoiding or capping, incorporating the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the discovery area until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person capable of providing long-term preservation to allow future scientific study.

Mitigation Measure CUL-2: In the event that human remains are unearthed during the excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings regarding origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and consult with the descendants all reasonable options regarding the descendants' preferences for treatment.

VI. ENERGY

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

Environmental Setting

Pacific Gas and Electric (PG&E) provides electricity services to the region. PG&E serves approximately 16 million people throughout a 70,000-square-mile service area in northern and central California. SCE supplies electricity to its customers through various renewable and nonrenewable sources. Table 3-6 below shows the proportion of each energy resource sold to California consumers by PG&E in 2021 compared to the statewide average.

Fuel Type		PG&E Power Mix	California Power Mix
Coal		0%	3%
Large Hydroelectric		4%	9.2%
Natural Gas		8.9%	37.9%
Nuclear		39.3%	9.3%
Other (Oil/Petroleum Coke/Waste Heat)		0.0%	0.2%
Unspecified Sources of Power[1]		0.0%	6.8%
Eligible Renewables	Biomass	4.2%	2.3%
	Geothermal	5.2%	4.8%
	Small Hydro	1.8%	1.0%
	Solar	25.7%	14.2%
	Wind	10.9%	11.4%
	Total Eligible Renewable	**47.7%**	**33.6%**
1. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.			

Table 3-7. 2021 PG&E and State average power resources; Source: PG&E and California Energy Commission

PG&E also offers Solar Choice and Renewable Choice programs, which allow consumers to indirectly purchase up to 100% of their energy from renewable sources without installing private rooftop solar panels. To accomplish this, PG&E buys the renewable energy necessary to meet the needs of participants.

Southern California Gas (SoCalGas) provides natural gas services to the Project area. Natural gas is an energy source developed from fossil fuels composed primarily of methane (CH4). According to the U.S. Energy Information Administration (EIA), approximately 30% of the natural gas burned in California is used for electricity generation. In addition, the residential sector consumes 21%, the industrial sector consumes 33%, and the commercial sector consumes 11%. Approximately 318,890,506 therms of natural gas are consumed annually within Fresno County.

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 Reedley 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 Reedley Climate Action Plan (2014): The City of Reedley Climate Action Plan establishes the following Goals and Policies related to energy efficiency and conservation:

Goal 1: Increase energy efficiency and conservation and reduction of CO2 emissions through:

1) Expand the current lighting retrofit program to include Traffic Signals: LED traffic signals provide a 90 % reduction in energy usage and have a longer lifespan. Additionally, LED traffic lights require less maintenance with lower rates of replacement, which can yield significant cost savings from bulb replacement and labor costs. It is estimated that by replacing traffic signals with LED lights the City of Reedley would reduce annual CO2 emissions by 16.5 metric tons and save an estimated $11,323.00 electricity costs.
2) Water Tower Energy Reductions: In September 2011, the City began construction of a new 170 foot high, 1.5-million-gallon water tower, which was completed in late 2014. The tower (depicted on the right) was built with the purpose of increasing water pressure city-wide and more importantly, to provide the required water pressure and additional water storage for firefighting. It is equipped with energy efficient pumps that allow the City to pump water at night instead of during daytime peak energy hours. Eventually the tower will phase-out two water towers, known as the twin towers behind the Reedley Opera House. These older towers are not tall enough to provide the needed water pressure and only have a combined storage capacity of 100,000 gallons. After the twin towers are removed from service, it is recommended that the City quantify GHG emission reductions resulting from the new, more energy efficient water tower.

3) Modernized/ Green Building Codes: The City of Reedley building codes are and will continue to evolve in order to ensure the efficiency and sustainability of local buildings. Emission reductions from windows and insulation with increased efficiency (etc.).
4) The City should establish a replacement policy and schedule to replace fleet vehicles and equipment with the most fuel-efficient vehicles practical, including gasoline hybrid and alternative fuel or electric models (GPU, COSP 4.4.17, Pg. 115).
5) The City will adopt purchasing practices and standards to support reductions in GHG emissions, including preferences for energy-efficient office equipment, and the use of recycled materials and manufacturers that have implemented green management practices (GPU, COSP 4.4.22, Pg. 116).
6) The City will continue to work collaboratively to created partnerships with PACE program providers who offer a landowner alternative financing for renewable energy generation, energy and water efficiency improvements, similar to Figtree Financing, the California HERO Program and the YGRENE Program.

City of Reedley General Plan: The City of Reedley 2030 General Plan *Conservation, Open Space, Parks, and Recreation Element* includes the following goals and policies intended to protect the City's energy resources and are relevant to the proposed Project.

Air Quality and Climate Change

- Goal COSP 4.4A: Effective communication, cooperation, and coordination in developing and operating community and regional air quality programs.
  - Policy COSP 4.4.17: The City will establish a replacement policy and schedule to replace fleet vehicles and equipment with the most fuel-efficient vehicles practical, including gasoline hybrid and alternative fuel or electric models.
  - Policy COSP 4.4.19: Incorporate infrastructure to facilitate the use of clean-fuel vehicles, such as electrical plug-in stations and L/CNG refueling stations for clean fuel vehicles.
  - Policy COSP 4.4.20: The City will prepare and implement a comprehensive plan to improve energy efficiency of municipal facilities, including:
    a) Conduct energy audits for municipal facilities.
    b) Retrofit facilities for energy efficiency where feasible and when remodeling or replacing components, including increased insulation, installing green or reflective roofs and low-emissive window glass, and ultra-low-flow toilets and water fixtures.
    c) Install renewable energy systems where feasible, including solar collection systems on municipal roofs and solar water heating.
    d) Install energy-efficient street signs and traffic lighting.
    e) Install Energy Star® appliances and energy-efficient vending machines.
    f) Maximize efficiency of wastewater treatment and pumping equipment.
    g) Maximize efficiency at water treatment, pumping, and distribution facilities.
  - Policy COSP 4.4.21: The City will require that any newly constructed, purchased, or leased municipal meet minimum standards as appropriate, such as:
    a) Incorporation of passive solar design features in new buildings, including day lighting and passive solar heating.

b) Retrofitting of existing buildings to meet standards under Title 24 of the California Building Energy Code, or to achieve a higher performance standard as established by the City.
c) Retrofitting of existing buildings to decrease heat gain from non-roof impervious surfaces with cool paving, landscaping, and other techniques.
d) Install outdoor electrical outlets on buildings to support the use of electric lawn and garden equipment, and other tools that would otherwise be run with small gas engines or portable generators.

Energy

- Goal COSP 4.8A: Reduce emissions related to energy consumption and area sources.
  - Policy COSP4.8.1: The City shall cooperate with the local building industry, utilities and the SJVAPCD to promote enhanced energy conservation standards for new construction.
  - Policy COSP4.8.2: The City shall encourage new residential, commercial, and industrial development to reduce air quality impacts from area sources and from energy consumption.
  - Policy COSP4.8.3: As many energy-conserving features as possible shall be included in each new project. Examples include, but are not limited to, increased wall and ceiling insulation, EPA-certified fireplace inserts and/or wood stoves or natural gas fireplaces, electrical and natural gas outlets installed around the exterior of the units to encourage use of electric yard maintenance equipment and gas-fired barbeques, and each home wired for computers/internet and electronic meter reading.
  - Policy COSP4.8.4: Encourage housing units and landscaping orientation in such a manner to maximize solar heating and cooling energy consumption.
  - Policy COSP4.8.6: The City will support the use of green building practices by:
    a) Providing information, marketing, training, and technical assistance about green building practices.
    b) Establishing guidelines for green building practices in residential and commercial development.
    c) Providing financial incentives, including reduction in development fees, administrative fees, and expedited permit processing for projects that use green building practices.
  - Policy COSP4.8.7: The City will establish outdoor lighting standards in the zoning ordinance, including:
    a) Requirements that all outdoor lighting fixtures be energy efficient.
    b) Requirements that light levels in all new development, parking lots, and street lighting not exceed state standards.
    c) Prohibition against continuous all-night outdoor lighting in sports stadiums, construction sites, and rural areas unless required for security reasons.
  - Policy COSP4.8.10: The City will require that new commercial, industrial, or major rehabilitation (e.g., additions of 25,000 square feet commercial, or 100,000 square feet industrial) development projects consider renewable energy generation either on- or offsite to provide 15% or more of the project's energy needs.

- Policy COSP4.8.11: The City will promote and encourage cogeneration projects for commercial and industrial facilities that provide a net reduction in GHG emissions associated with energy production.
- Policy COSP4.8.12: The City will require that, where feasible, all new buildings be constructed to allow for easy, cost-effective installation of solar energy systems in the future.

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

Construction

The construction will limit energy use to the greatest extent possible through compliance with local, State, and Federal regulations. During project construction, energy use would be from the petroleum-based fuels used to power construction vehicles and equipment on the project site, construction workers traveling to and from the project site, and vehicles used to deliver materials to the site (Table 3-7). For a conservative estimate, worker trips are shown using gasoline, while vendor trips use diesel.

Source	Energy Use	
	Gallons	MBTU
Site Preparation Off-Road Equipment	942	131
Grading Off-Road Equipment	2,404	334
Construction Off-Road Equipment	29,906	4,157
Paving Off-Road Equipment	2,201	281
Architectural Coating Off-Road Equipment	232	32
Total Off-Road Equipment Fuel (Diesel)	***35,505***	***4,935***
On-Road Vehicle Fuel (Gasoline)	708	82
On-Road Vehicle Fuel (Diesel)	679	94
Total On-Road Vehicle Fuel	***1,387***	***177***
Total Construction Energy Use		**5,112**
Average Annual Construction Energy Use		**4,784**

Table 3-8. Construction Related Energy Use. Source: CalEEMod (Appendix A) & EMFAC (See Appendix D)

Operational

Table 3-8 shows the annual energy use associated with the Project operations. Operations will total approximately 11,639 MBTUs per year under 2025 operational conditions. Expected annual energy use will decrease over time due to improvements in vehicle fuel regulations and building energy 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 Project operations. Therefore, potential impacts would *be less than significant.*

Source	Energy Use	
Fuel Use		
	Gallons/year	**MBTU**
Mobile Fuel (Diesel)	13,820	1,921
Mobile Fuel (Gasoline)	77,958	9,050
Electricity Use		
	kWh/year	**MBTU**
Convenience Market with Gas Pumps	41,311	140
Medical Office Building	97,240	331
Natural Gas Use		
	kBTU/year	**MBTU**
Convenience Market with Gas Pumps	55,342	55
Medical Office Building	142,120	142
		MBTU
Total Annual Operational Energy Use		**11,639**

Table 3-9. Operations Related Energy Use. Source: CalEEMod (Appendix A) & EMFAC (See Appendix D)

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 design of the Project will meet Title 24 and CALGreen requirements. The City of Reedley will enforce compliance with these standards. There is *no impact.*

VII. GEOLOGY AND SOILS

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

Environmental Setting

Geologic Stability and Seismic Activity

- **Seismicity**: Although there are some active and potentially active faults in the region, there are no known active faults within Reedley. The nearest fault zone is the San Andreas Fault, approximately 70 miles west of the Site. The San Andreas Fault is California's most extended and significant fault zone. According to the 2018 *Fresno County Multi-Jurisdictional Hazard Mitigation Plan,* the Project Site has a low probability of seismic activity. Based on analyses of faults, soils, topography, and groundwater, the Site has a 0.2% to 0.4% probability of an earthquake occurring every 50 years.

- **Liquefaction**: Liquefaction is a process whereby soil is temporarily transformed to fluid during intense and prolonged ground shaking. Areas most prone to liquefaction are water saturated (e.g., where the water table is less than 30 feet below the surface) and consist of relatively uniform sands that are loose to medium density. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like soil behavior, which can result in landslides and lateral spreading. No specific countywide assessment of liquefaction has been performed. However, the 2018 *Fresno County Multi-Jurisdictional Hazard Mitigation Plan* identifies the risk of liquefaction within the County as low because the soil types in the area are 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 the gravitational influence. Landslides can be caused by natural and human-induced slope stability changes and often accompany other natural hazard events, such as floods, wildfires, or earthquakes. Eastern portions of Fresno County are at a higher risk of landslides where steep slopes are present. However, because of its flat topography, most of Fresno County, including the proposed Project Site, is at low risk of landslides and mudslides.

- **Subsidence**: Land Subsidence refers to the vertical sinking of land because of artificial or natural underground voids. Subsidence has occurred throughout the Central Valley at differing rates since the 1920s because of groundwater, oil, and gas withdrawal. During drought years, Fresno 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, most of the County, including the proposed Project Site, is not considered at risk of subsidence-related hazards.

Soils Involved in Project: The proposed Project involves the construction on top of one soil type. The properties of this soil are described below:

- **Exeter Loam, 0 to 2 percent slopes:** The Exeter series consists of shallow, well-drained soils. Exeter soils exhibit medium runoff and very slow to moderately slow permeability due to the tendency of the soil to form cemented hard pans (duripans) close to the soil surface. Silica accumulation has cemented these physically root-restrictive layers beneath the soil surface.

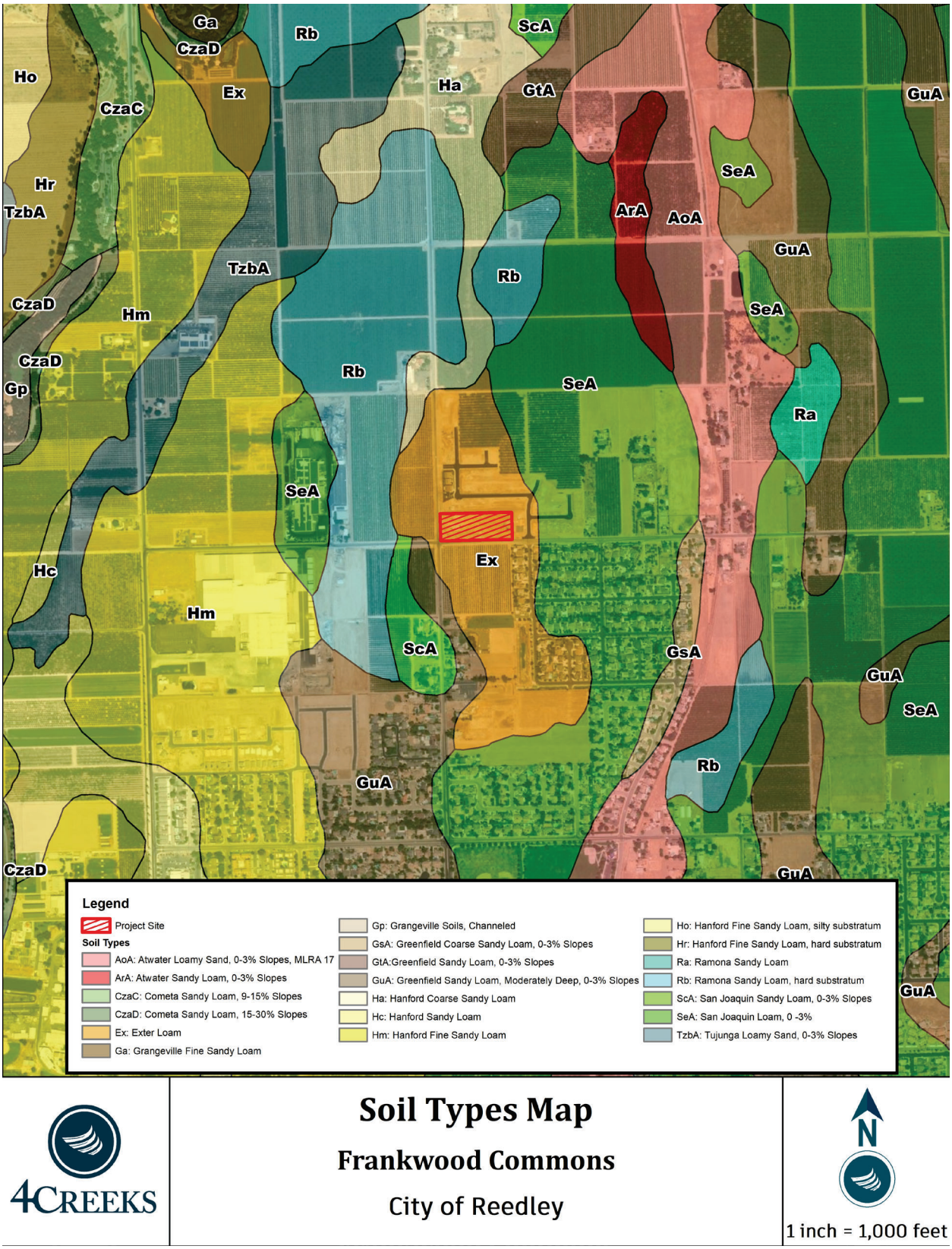


Figure 3-4: Soil map of proposed Project area

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 specific equipment.

City of Reedley General Plan: The City of Reedley 2030 General Plan *Safety Element* includes the following goals and policies intended to protect the City's geological resources and are relevant to the proposed Project.

- Goal SE 5.0A: Prevent and minimize personal injury and loss of life due to natural and manmade hazards.

Geologic Hazards

- Goal SE 5.2A: Protect the lives and property of residents of the Reedley area by establishing urban growth patterns and development policies which recognize the limitations of soils and physical features.
  - Policy SE 5.2.1: Proposed development Projects may be subject to a variety of discretionary action and conditions of approval. The actions and conditions are based on adopted City plans and policies essential to mitigate adverse effects on the City of Reedley, General Plan 2030 Page 160 environment including the health, safety, and welfare of the community. For example, the City may require a preliminary soil (Reedley Municipal Code, Section 11-4-2-D), geotechnical or seismic reports when the subject property is located on land exhibiting potentially unstable soil conditions, suitability for additional development, or other hazardous geologic conditions.
  - Policy SE 5.2.2: Development should be prohibited in areas where corrective measures to affect the geologic hazard are not feasible.
- Goal SE 5.4A: Minimize serious physical damage to structures used for human occupancy and to critical facilities and structures where large numbers of people are apt to congregate.
- Goal SE 5.4B: Ensure the continuity of vital services, functions, and facilities.
  - Policy SE 5.4.1: A building or structure constructed prior to 1948 should be examined to determine the earthquake resistant capacity. If the structure is determined to be below an acceptable standards a program to minimize potential hazard should be established.
  - Policy SE 5.4.2: Structures of more than 50 feet or four (4) stories or requiring special design considerations for seismic hazards shall be constructed consistent with State law. Additional factors to be considered, as recommended in the Five County Seismic Safety Element, are as follows:
    a) A dynamic analysis procedure shall be used for assessing structural design requirements for structures of more than 50 feet or four (4) stories.
    b) Critical facilities should be designed at double the current seismic design forces required in Zone 3 by the current California Uniform Building Code.

c) The bracing and anchoring of all mechanical and electrical equipment for critical facilities shall be designed to withstand lateral seismic forces equal to 20 percent of its total dead load.

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 Reedley County Multi-Hazard Mitigation Plan, no active faults underlay the Project Site. Although the Project is 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 the distance to the faults. The Project has no potential to cause the rupture of an earthquake fault indirectly or directly. 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 2018 *Fresno County Multi-Jurisdictional Hazard Mitigation Plan*, the Project Site is 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 2018 *Fresno County Multi-Jurisdictional Hazard Mitigation Plan* identifies the risk of liquefaction within the county as low because the soil types are unsuitable for liquefaction. According to State soil maps, the Project Site consists of Exeter 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 has no hill slopes. As a result, there is 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 impervious surfaces can increase the

probability of erosion. Construction-related impacts related to erosion will be temporary and subject to best management practices (BMPs) as required by SWPPP. BMPs are developed to prevent significant impacts associated with erosion from construction. Because erosion-related impacts would be temporary and limited to construction, and requiring 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 soil type associated with the Project Site is considered stable and has a low capacity for landslides, lateral spreading, subsidence, liquefaction, or collapse. Because the Project area is 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 soil associated with the proposed Project Site is granular, well-draining, and therefore cannot absorb water or exhibit expansive behavior. Because the soils associated with the Project are not suitable for expansion, implementation of the Project will pose no direct or indirect risk to life or property caused by expansive soils, and there is *no impact.*

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

No Impact: The proposed Project will have access to existing City wastewater infrastructure and will not require 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, no known paleontological resources located within the Project area, and no excavation proposed in undisturbed soils, particularly to a depth with a potential to unearth paleontological resources. Potential impacts resulting from Project implementation would be *less than significant.*

VIII. GREENHOUSE GAS EMISSIONS

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

Environmental Setting

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

The effect of greenhouse gasses on the earth's temperature is equivalent to how a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydrochlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, 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 equals twenty-one pounds of carbon dioxide.

GHGs, as defined by AB 32, are summarized in Table 3-9. GHGs include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Each gas's effect on climate change depends on three main factors. The first is the quantity of these gases in the atmosphere, followed by how long they stay in the atmosphere, and finally, how strongly they impact global temperatures.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Methane (CH4)	Is a flammable gas and is the main component of natural gas	12 years	21	Emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
Carbon dioxide (CO2)	An odorless, colorless, natural greenhouse gas.	30-95 years	1	Enters the atmosphere through burning fossil fuels (coal, natural gas and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
Chloro-fluorocarbons	Gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are non-toxic nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	55-140 years	3,800 to 8,100	Were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone.
Hydro-fluorocarbons	A man-made greenhouse gas. It was developed to replace ozone-depleting gases found in a variety of appliances. Composed of a group of greenhouse gases containing carbon, chlorine an at least one hydrogen atom.	14 years	140 to 11,700	Powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases.
Nitrous oxide (N2O)	Commonly known as laughing gas, is a chemical compound with the formula N2O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effects.	120 years	310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
Pre-fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.
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 3-10. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

Regarding the quantity of these gases 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 gas tank in a compact car. Therefore, it can be assumed larger emissions of greenhouse gases lead to a higher concentration in the atmosphere.

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

Regulatory Setting

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 Reedley Climate Action Plan: The 2014 Climate Action Plan identifies the following goals and policies to reduce GHG emissions:

- Near-term: reduce GHG emissions by 15% of 2005 levels by 2020.
- Mid-term: reduce GHG emissions by 50% below 2005 levels by 2030.
- Long-term: reduce GHG emissions by 80% below 2005 levels by 2050.

The City of Reedley must reduce 50% of Greenhouse Gas (GHG) emissions to meet the State mandated 2030 near-term emission reduction goal. To maintain city-wide growth and attain this GHG reduction goal, the City requires that all new, in-fill, re-use, and rehabilitation proposed projects meet a 20% reduction in GHG emissions. Through completing this checklist, project applicants must demonstrate how projects will comply with the 20% GHG reduction requirement. Alternative calculations and measures may be used upon approval. Listed below are recommended measures and average reductions {in percentage).

GHG Reduction Measure	% Average Reduction
Construction	
20% of construction materials are manufactured regionally	TBD
50-100% diversion of construction materials from waste materials generated during the project.	TBD
Solar Systems	
Photovoltaic solar energy provides 20-49% of power needs (Annual Average)	17%
Photovoltaic solar energy provides 50-74% of power needs (Annual Average)	31%
Photovoltaic solar energy provides 75-100% of power needs (Annual Average)	44%
Solar Hot Water (Residential)	6%
Solar Hot Water (Commercial)	1.8%
Insulation	
Enhanced insulation: rigid walls insulation R-13, roof/attic R-38	4.5%
Greatly enhanced insulation: rigid walls insulation R-15, roof/attic R-38 or higher	6.75
Windows	
Modestly enhanced window insulation: 0.4 U-Factor, 0.32 solar heat gain coefficient (SHGC)	6%

Enhanced window insulation: 0.32 U-Factor, 0.25 SHGC	10%
Greatly enhanced window insulation: 0.28 U-Factor, 0.22 SHGC	14%
Cool Roof	
Cool Roof: Light-colored, high albedo roof	0.3%
Lighting	
Passive Lighting: Light shelves and/or sunlights	3.75%
Air Filtration and HVAC	
Sealed air ducts with a minimum insulation of R-6	9%
Air Curtain and Automatic Door Combo (Commercial)	4%
Air Curtain	1.5%
Improved efficiency HVAC. A minimum SEER 14/16% AFUE or 8 HSPF	11%
Water Efficiency	
Energy Star or better rated water heater	12%
Low flow kitchen faucet	1%
Low flow bathroom faucet	1%
Low flow shower	1%
Low flow toilet	1%
Drip irrigation or low precipitation spray heads	0.2%
Landscape with California native plants (50% to 100%)	TBD
Graywater systems	1%
Miscellaneous	
Install EV Charging Station	0.11%
Landscaping for Energy Efficiency: Plant shade trees on building's south side	2%
Land Use Based Trip and/or VMT Reduction	
Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The percent reduction will be determined based upon a traffic impact study demonstrating trip reductions and/or reductions in vehicle miles traveled.	TBD
Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The percent reduction will be determined based upon a traffic impact study demonstrating trip reductions and/or reductions in vehicle miles traveled.	TBD
TBD: Applicant must quantify and support this measure's GHG reductions.	

Table 3-11: Reedley GHG Reduction Checklist

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: Table 3-12 Shows the GHG reduction measures the Project will use to meet the 20% reduction threshold.

GHG Reduction Measure	Project Compliance	% Average Reduction
Solar Systems		
Photovoltaic solar energy provides 20-49% of power needs (Annual Average)	The Project will include solar as required by Title 24 Standards. Solar will generate at least 20% of the Project's power needs.	17%
Air Filtration and HVAC		
Sealed air ducts with a minimum insulation of R-6	Project will follow Title 24 standards with a minimum insulation of R-8	9%
Air Curtain and Automatic Door Combo (Commercial)	Project will follow Title 24 standards by including an Air Curtain and Automatic Door Combo	4%
Miscellaneous		
Install EV Charging Station	EV Stations will be on-site as required by Title 24.	0.11%
Landscaping for Energy Efficiency: Plant shade trees on building's south side	Trees will be present on the buildings south side.	2%
Land Use Based Trip and/or VMT Reduction		
Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The percent reduction will be determined based upon a traffic impact study demonstrating trip reductions and/or reductions in vehicle miles traveled.	Residential developments surround the site, currently unknown reduction %.	TBD
Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The percent reduction will be determined based upon a traffic impact study demonstrating trip reductions and/or reductions in vehicle miles traveled.		TBD
		Minimum Reduction: 32.11%

Table 3-12. Project GHG Reduction Checklist

The Project's reduction from the measures will be at least 32.11%. This reduction is higher than the required 20%. Therefore, the Project would not generate a cumulatively considerable GHG impact. 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 regarding regulating greenhouse gas emissions. As stated above, the Project was found to be consistent with Reedley's CAP, which states that Projects that achieve a 20% GHG emission reduction would have a less than significant individual and cumulative impact on GHG. This threshold was developed for Reedley to meet the State mandated GHG emission reductions.

The proposed Project is consistent with all the Federal, State, and Local regulations adopted to reduce greenhouse gas emissions and have *no impact.*

IX. HAZARDS AND HAZARDOUS MATERIALS

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

Environmental Setting

The proposed Project Site is approximately one mile north of the nearest school (Thomas Law Reed Elementary School) and 3.5 miles south of the nearest airstrip (Reedley Municipal Airport).

The Department of Toxic Substances Control's (DTSC's) Envirostor was used to identify any sites associated with the 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.

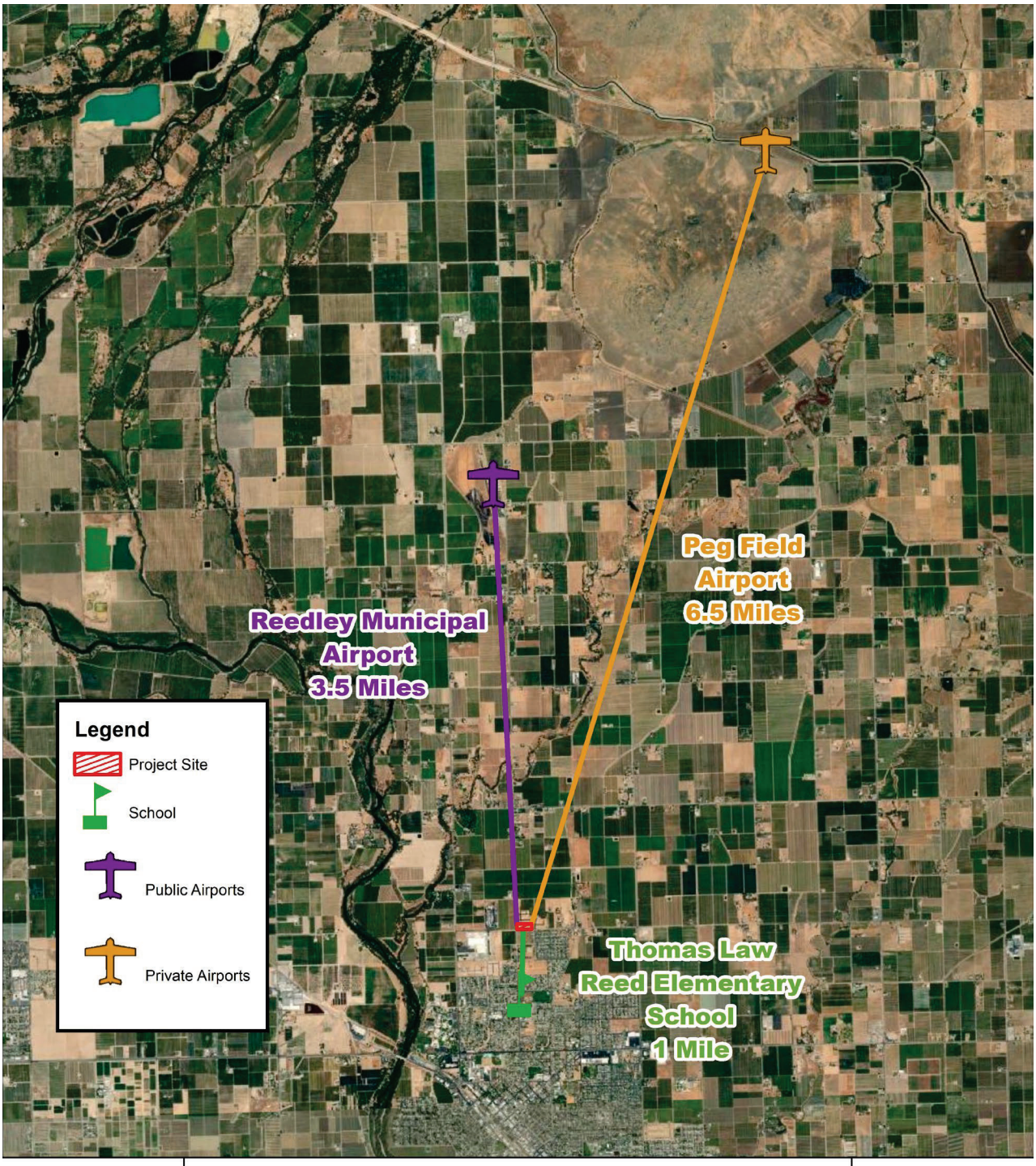


Figure 3-5: Distance to schools and airports

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

- Goal SE 5.0A: Prevent and minimize personal injury and loss of life due to natural and manmade hazards.
- Goal SE 5.0C: Protect the City and its residents from avoidable loss resulting from improper development in hazardous areas.
- Goal SE 5.6A: Protect the public and the environment from exposure to hazardous materials.
  - Policy SE 5.6.1: Assess the risk involving the transportation, disposal, manufacture, storage, and handling of any hazardous materials at all levels of planning.
  - Policy SE 5.6.3: Establish a program to obtain hazardous materials control, technical assistance, and cleanup to response to hazardous materials incidents.

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 using and transporting hazardous materials during construction would be addressed by implementing 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 implementing and enforcing the SWPPP. It would conduct inspections of the Project Site to ensure effective implementation of the BMPs specified in the SWPPP.

Operation of the Project would involve transporting, using, and disposing of small amounts of hazardous materials, including motor vehicle fuel, lubricants, antifreeze, used coolant, janitorial supplies, paint, degreasers, pesticides, herbicides, and fire suppressants. Other hazardous wastes associated with the medical clinic include Regulated Medical Waste (RMW), including items generated from procedures that may be saturated with blood or other potentially infectious materials. Potential impacts related to the use of hazardous materials during Project operations would be addressed through the implementation of Hazardous Materials Business Plans (HMBPs), which would be required for each business handling hazardous materials that exceed quantity thresholds established by the Reedley 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. Implementing the HMBPs would ensure that any minor spills or releases of hazardous materials would not pose a significant risk to the public or the environment.

In summary, implementing HMBPs and SWPPPs required for the Project would ensure that hazardous materials used in construction and operation are handled, stored, and disposed of under 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 commercial development project will include a fueling station. As discussed above, the Project would be required to implement an SWPPP during Project construction and HMBPs during Project operations. The SWPPP and HMBPs would include procedures specifically developed to prevent a significant risk to the public or environment in the event of accident conditions involving the release of hazardous materials. Implementing 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?

Less than significant impact: No existing or planned schools within 0.25 miles of the proposed Project Site exist. Thomas Law Reed Elementary School is the nearest school located approximately one mile south of the Frankwood Commercial development. The SWPPP and HMBPs would include procedures and practices specifically developed to prevent a significant risk to the public in the event of a release of hazardous materials. Therefore, there is a *less than significant 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 according 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 or two miles of a public airport. The Reedley Municipal Airport is the nearest public airport to the Project Site, located approximately 3.5 miles away. Implementing 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 2018 Fresno County Multi-Jurisdictional Local Hazard Mitigation Plan finds that fire hazards within the City of Reedley, 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.*

X. HYDROLOGY AND WATER QUALITY

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

Environmental Setting

Hydrologic System: The proposed Project Site is located within the San Joaquin Valley Groundwater Basin, which covers roughly 15,880 square miles in the Central Valley of California. The San Joaquin Valley Groundwater Basin is divided into seven sub-basins. The City of Reedley and the proposed Project Site lie directly over the Kings Subbasin, a large subbasin spanning 1,530 square miles in the southern portion of the San Joaquin Valley Groundwater Basin. The subbasin is located near the Kaweah Groundwater Subbasin on the south, the Tulare Lake Groundwater Subbasin to the southwest, the Madera Subbasin to the north, and the crystalline bedrock of the Sierra Nevada foothills on the east. The significant water sources in the subbasin include the runoff from the Sierra Nevada Mountains, surface runoff from creeks, irrigation ditches, percolation ponds, and the Kings River, all considered the primary surface water sources for groundwater recharge. The watershed for the Project area is the South Branch Island Canal of the Kings River, and the Project area is located in the Tulare Lake hydrologic region. The City's Department of Public Works, Water Division advises the distribution and management of the City's water supply, which consists solely of groundwater wells on the eastern side of the Kings River.

Groundwater: The City of Reedley consists of seven active wells that supply potable water to the City, each well-pumping water directly into the water system, which contains 82 miles of water transmission and distribution mains and three elevated storage tanks. The City's entire 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 Reedley joined a Joint Power Authority (JPA) Agreement to form the Kings River East Groundwater Sustainability Agency (GSA). Reedley joined alongside 15 other agencies including Fresno and Tulare Counties, the Cities of Dinuba and Orange Cove, the Kings River and Tri-Valley Water Districts, nearby Irrigation Districts (Alta ID, Hills Valley ID, and Orange Cove ID), Utility Districts (Cutler Public UD, East Orosi Public UD, and Orosi Public UD, and Community Service Districts (London CSD, Sultana CSD, and Yetterm-Sevile CSD). The JPA states the Board of Directors is responsible for developing, adopting, and implementing a Groundwater Sustainability Plan as required by the Sustainable Groundwater Management Act of 2014.

Surface Waters: The only significant surface water feature in Reedley is the Kings River. All other surface water is from manmade channels and reservoirs. None of the City's potable water is supplied through surface water. There is no surface water on or near the Project Site.

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, an NPDES Permit and SWPPP will be required.

Reedley Municipal Code – Water Conservation: Section 8-1-12 of the Municipal Code codifies the City's regulations for water conservation. The Municipal Code specifies restrictions on actions that result in waste of water and on landscape irrigation.

Reedley Municipal Code – Stormwater Management: Section 8-5-1 of the Municipal Code codifies the City's regulations for implementing stormwater quality management strategies consistent with its General Construction permit from the Central Valley Regional Water Quality Control Board. The regulations apply to all stormwater generated on any developed or undeveloped urban land within the City or conveyed by the public storm drain system. The critical component of the regulations is as follows:
All persons engaged in activities which will or may reasonably be expected to result in pollutants entering the public storm drain system shall undertake best management practices (BMPs) to minimize such pollutants, shall provide protection from accidental discharge of pollutants to the public storm drain system and comply with cleanup and notification requirements of this chapter. Such measures shall include the requirements imposed by federal, state, county, or local authorities. BMPs are site specific and are described in the documents " "Storm Water Best Management Practice Handbook: Construction"; "Storm Water Best Management Practice Handbook: New Development And Redevelopment"; "Storm Water Best Management Practice Handbook: Industrial And Commercial"; "Storm Water Best Management Practice Handbook: Municipal"; or other guidance documents available from EPA and/or RWQCB.

Reedley Municipal Code – Flood Hazard Management: Titles 10 and 12 of the City's Municipal Code contain a range of flood hazard management regulations that implement the City's overall flood hazard management program. The Municipal Code regulations address the purposes and application of the program, flood hazard regulations that specify measures which must be implemented by new development projects to minimize impacts of flooding on the development and minimize potential for new development to intensify existing floods hazards, and flood hazard program administration requirements.

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

- Goal CIR 3.10A: Provide adequate water services to the City of Reedley.
  - Policy CIR 3.10.4: The City shall actively support efforts to expand surface water supply and storage that benefits the City. These efforts should include, but not be limited to, coordination with Irrigation Districts for water banking, and WWTP effluent recycling and percolation.
  - Policy CIR 3.10.5: The City shall require that necessary water supply infrastructure is available prior to constructing new development, and approve development entitlements only when there is assurance of a dependable and adequate water supply that will serve the development.
  - Policy CIR 3.10.7: The City shall cooperate with surrounding water management authorities and irrigation districts to develop a comprehensive water management and recharge program which addresses the long-term stabilization of the Kings Basin and the transfer of excess WWTP effluent recycled water for use by the districts for recharge or use by their constituents.
  - Policy CIR 3.10.9: The City shall encourage and cooperate with the private sector, as appropriate, to incorporate alternative methods of water reuse into new development, such as reclaimed water from irrigation, landscaping, and purple pipe systems.

- Goal LU 2.7S: Provide for the timely and economically efficient development of all public services and facilities necessary for Reedley's planned urban growth.
  - Policy LU 2.7.71: Retention basins shall be developed at appropriate locations to help recharge the groundwater basin. If properly designed, retention basins can also function as local parks.
  - Policy LU 2.7.73: Maintain adequate facilities to accommodate sewage disposal for both existing residents and future development.
  - Policy LU 2.7.74: Maintain adequate facilities for water and storm drain service to service existing residents and future development.

- Goal COSP 4.2A: Preserve and protect the natural resources that contribute to the well-being of the residents of Reedley.

- Policy COSP 4.2.3: Protect areas of groundwater recharge from land uses and disposal methods which would degrade water sources.
- Policy COSP 4.2.4: Provide public sewer service to new urban development as a means of protecting groundwater resources.
- Policy COSP 4.2.6: Promote activities which combine storm-water control and water recharge.
- Policy COSP 4.2.7: The City will enhance groundwater recharge supply by requiring the installation of detention/retention ponds in new growth areas.
- Policy COSP 4.2.8: Continue to implement provisions of the Kings River Corridor Specific Plan to ensure conservation of the riparian area.
- Policy COSP 4.2.10: Continue to encourage water conservation.

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 on water quality due to potentially polluted runoff generated during construction activities. Construction would include excavation, grading, and other earthworks that may occur across most of the 4.19-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. The Project will require implementing a Stormwater Pollution Prevention Plan (SWPPP). An 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: Reedley will provide water services upon development. The City's only water supply source is seven wells that extract water from an underground aquifer. According to City's Urban Water Management Plan (2021), the Projected water supply and demand for Reedley in 2025 is 1,795 million gallons (MG), an increase from the 2020 supply and demand of 1,639 MG.

The total water demand of the proposed Project was estimated using the City of Reedley Water System Master Plan (2014), which states that water demand for commercial land uses approximately 2,840 gallons/day/acre. Based on this information, the proposed 4.19-acre Project is expected to use approximately 11,899 gallons per day (GPD), or 4.3 MG/year. From 2020 to 2025, the City plans to increase the water supply by 156 MG/year. The City would have sufficient groundwater supplies for the Project.

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 Kings Subbasin beyond what is already analyzed in the most current General Plan EIR and Water Management Plan.

The Project would result in the nearly complete development of the Site, which would convert approximately 4.19 acres from pervious to impervious surfaces. However, this would not significantly interfere with groundwater recharge because all stormwater will be collected and diverted to an existing retention basin north of the Project Site for groundwater recharge. All stormwater is accounted for in the new stormwater basin. The calculations can be found in Appendix B.

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 4-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 by implementing a Stormwater Pollution Prevention Plan (SWPPP), which includes mandated erosion control measures 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 maintain existing drainage patterns during Project operations. The Project would not result in substantial erosion or siltation on- or off-Site. The impact is *less than significant with the 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 4.19-acre Project Site, which could potentially increase surface runoff resulting in flooding on- or off-Site. This impact would be appropriately mitigated through the implementation of Mitigation Measure HYD-2, which requires the Project to submit drainage plans to the City Engineer before 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 add impervious surfaces and alter existing drainage patterns on the 4.19-acre Project Site. This could potentially 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 by implementing a Stormwater Pollution Prevention Plan (SWPPP), which includes mandated erosion control measures 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- 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 will 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 the 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 4.19-acre Project Site, which could affect drainage and flood patterns. This impact would be appropriately mitigated through the implementation of Mitigation Measure HYD-2, which requires the Project to submit drainage plans to the City Engineer before the issuance of grading permits. The drainage plans will include BMPs to ensure the Project will 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 Federal Emergency Management Agency (FEMA) states that the Site is in Zone X, or an "Area of Minimal Flood Hazard" The proposed Project is in a relatively flat area and would not be impacted by inundation related to mudflow. Since the Project is in an area that is not susceptible to inundation, the Project would not risk the 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 the implementation of a water quality control plan. The proposed Project will be subject to the requirements of the NPDES Stormwater Program. It will be required to comply with an 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 Kings River East Groundwater Sustainability Agency (GSA). The Kings River East GSA adopted the Groundwater Sustainability Plan (GSP) in January 2020. 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 the implementation of the GSP. There is *no impact.*

Mitigation Measures for Hydrology and Water Quality

Mitigation Measure HYD-1: Prior to issuing grading permits, the Project proponent shall submit an 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 to keep all erosion products 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 Reedley Engineering Division with evidence of an approved SWPPP prior to the issuance of grading permits.

Mitigation Measure HYD-2: To minimize impacts during construction, the Project proponent shall prepare a drainage plan, prior to issuance of grading permits, 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 per the City's SWMP and California Stormwater Quality Association's Storm Water Best Management Practices Handbook, and the City Engineer's Technical Specifications and Public Improvement Standards.

During the Project's final design, 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 the operation and maintenance of the Project. These measures shall account for the proposed 4.16 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).

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 City Engineer may also require other necessary BMPs and design features. The Project proponent shall also prepare and submit an Operations and Maintenance Agreement to the City of Reedley 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 the trash and loading dock areas;
- Bins shall be lined or otherwise constructed to reduce the 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 basins, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills, or washdown 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?	☐	☐	☐	☑
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Environmental Setting

The proposed Project Site is located in the northern portion of the City of Reedley. The Site is currently vacant and designated for Neighborhood Commercial use under the City of Reedley General Plan and CN Neighborhood Commercial under the City of Reedley Zoning Ordinance. The properties to the Site's north, south, and east are planned for Low-Density Residential uses, and the areas to the west are a mixture of designations for Open Space, Public Facilities, High-Density Residential, and Neighborhood Commercial land uses.

Regulatory Setting

City of Reedley General Plan: Neighborhood Commercial land uses will include a mix of retail and service-oriented uses that are meant to serve nearby neighborhoods, provide a destination to assist in local transit, and provide places for social gatherings of local residents. The City of Reedley General Plan has formed policies with pedestrians in mind and to facilitate the connectivity to surrounding areas.
Developments in this designation typically do not exceed five acres in size, although larger sites are possible depending on the uses proposed. The following goals and policies in the 2030 City of Reedley General Plan are applicable to the Project Site's neighborhood commercial land use designation:

- Goal LU 2.7K: Designate sufficient commercial land to accommodate growth for the entire planning horizon.
  - LU 2.7.23: Future commercial development in the planning area shall be well designed to respect neighborhood scale and traditional architectural design. Toward that end, commercial development will be reviewed utilizing the following design standards:
    a) Parking space requirements shall be minimized for commercial developments. Parking lots should be segmented to minimize the impact of parking on the streetscape. In particular, parking should be located to the rear or to the side of commercial and office buildings.
    b) Incorporate interface design standards (e.g., setbacks, fencing) into each residential and commercial zone district to ensure compatibility.
    c) Commercial development shall be designed to facilitate pedestrian and bicycle access and function, featuring outdoor seating, pedestrian plazas, and wide, shade-covered walkways.

d) Landscaping, particularly shade trees and drought tolerant plants, shall be maximized in all commercial developments.

- LU 2.7.24: Ensure that all commercial land uses are developed and maintained in a manner complementary to and compatible with adjacent residential land uses, to minimize interface problems with the surrounding environment, and to be compatible with public facilities and services. As part of the City's Project review process, major emphasis will be given to Site and building design in order to ensure and/or preserve functionality and community aesthetics.
    a) Development Projects shall appropriately interface with adjacent properties.
    b) Shopping Centers shall embrace a unified building, landscaping, and signage design.
    c) Building facades with visible sides of buildings shall not develop with featureless, "blank walls".
    d) Adequate screen roof-mounted mechanical equipment and ensure that such equipment adhere to noise standard set forth in the General Plan Noise Element.
- LU 2.7.25: Off-street parking for commercial areas shall be designed to adequately support surrounding land use pattern. Off-street parking areas shall also include landscaping to provide shading for at least 50 percent of the surfaced area within 10 years from planting.
- LU 2.7.26: Encourage efficient use of land by allowing a percentage of compact car parking spaces.
- LU 2.7.27: Planned unit developments shall be permitted in all commercial designations.
- LU 2.7.28: Encourage continued efforts to improve the appearance of the commercial areas including the commercial corridor along 11th Street.

Policies for Neighborhood Commercial Land Uses:

- LU 2.7.33: New Neighborhood Commercial planned land uses shall be located no closer than ¼ mile from similar commercial uses.
- LU 2.7.34: Neighborhood Commercial uses shall be sited in locations where they can function as “activity nodes” for surrounding neighborhoods.
- LU 2.7.35: Neighborhood Commercial shopping centers shall be designed to facilitate easy pedestrian and bicycle access from surrounding neighborhoods.
- LU 2.7.36: Neighborhood Commercial shopping centers shall be approximately 1 to 10-acres in size.
- LU 2.7.37: Neighborhood Commercial uses shall provide for various intensities of commercial activities. Such activities may range from a single use to a neighborhood shopping center up to ten acres.
- LU 2.7.38: Neighborhood Commercial uses shall be designed to be compatible with adjacent residential uses by addressing scale, height and architectural.
- LU 2.7.39: Locations at an intersection are most appropriate for Neighborhood Commercial uses.

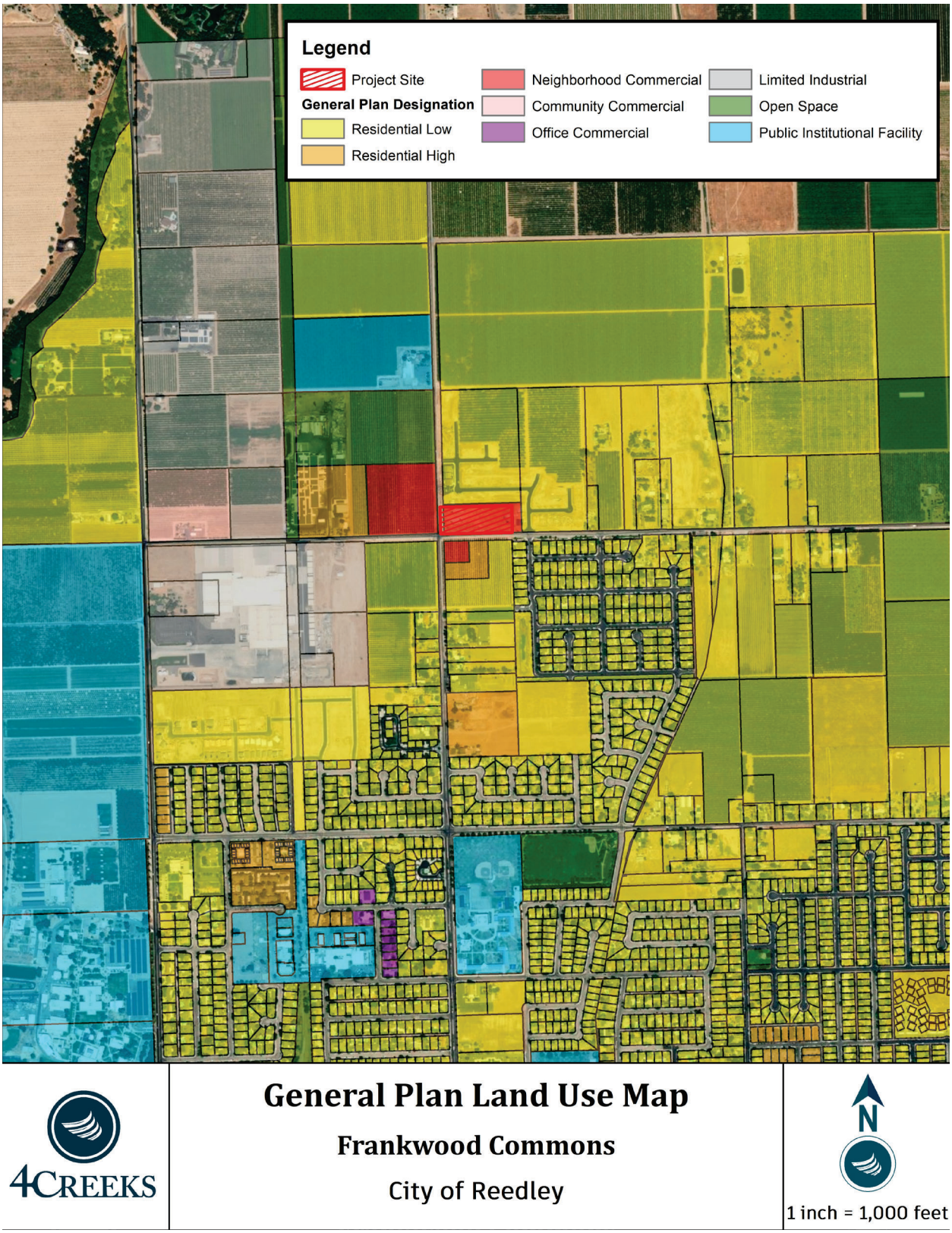


Figure 3-5: City of Reedley General Plan land use designations.

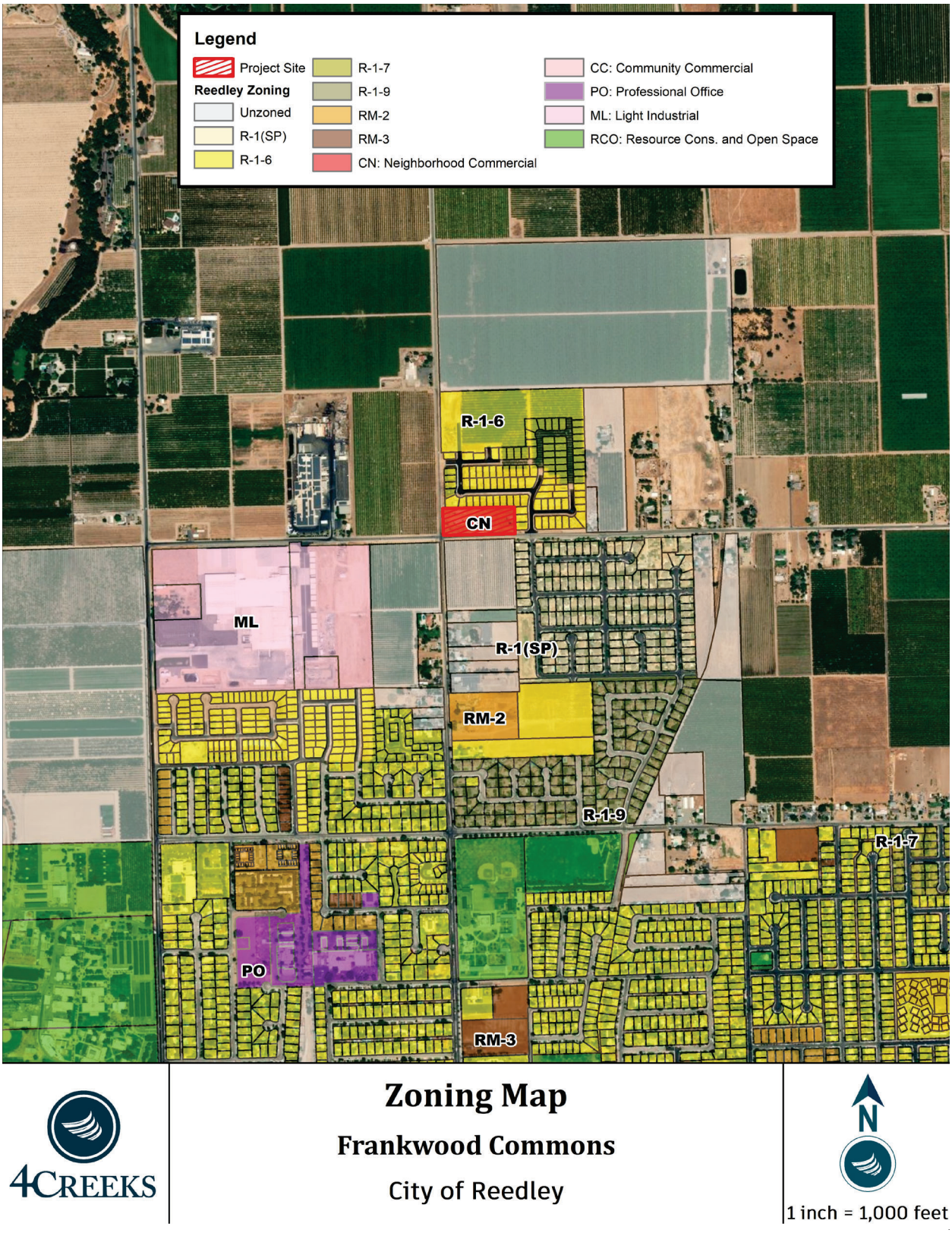


Figure 3-6: Zoning designations for the City of Reedley.

Discussion

a) Would the Project physically divide an established community?

No Impact: The Project proposes a 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.*

XII. MINERAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally - important mineral resource recovery Site delineated on a local general plan, specific plan or other lands use plan?	☐	☐	☐	☑

Environmental Setting

There are no mineral resource zones in Reedley, and no mineral extraction occurs on or adjacent to the proposed Project Site. The City has not previously or currently designated important mineral resources recovery areas within or immediately adjacent to the City.

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, prevent adverse environmental impacts, and preserve the state's mineral resources. The Act is enforced by the California Department of Conservation's Division of Mine Reclamation.

City of Reedley General Plan: The *Conservation and Open Space Element* of the City of Reedley General Plan contains goals and policies designed to conserve, protect, and maintain resources, including water, soils, wildlife, and minerals:

- Goal COSP 4.2A - Preserve and protect the natural resources that contribute to the well-being of the residents of Reedley.
- Goal COSP 4.2B - Encourage the maximum cooperation among all levels of government and private individuals in the management, conservation, and protection of open space resources.

Fresno County General Plan: The *Agriculture and Land Use* and *Open Space* Elements provide the following goals and policies regarding the conservation and management of mineral resources.

  - Policy LU-A.4 The County shall require that the recovery of mineral resources and the exploration and extraction of oil and natural gas in areas designated Agriculture comply with the Mineral Resources Section of the Open Space and Conservation Element.
- Goal OS-C: To conserve areas identified as containing significant mineral deposits and oil and gas resources for potential future use, while promoting the reasonable, safe, and orderly operation of mining and extraction activities within areas designated for such use, where environmental, aesthetic, and adjacent land use compatibility impacts can be adequately mitigated.

- Policy OS-C.2: The County shall not permit land uses incompatible with mineral resource recovery within areas designated as Mineral Resource Zone 2 (MRZ-2)
- Policy OS-C.3: The County shall require that the operation and reclamation of surface mines be consistent with the State Surface Mining and Reclamation Act (SMARA) and special zoning ordinance provisions.
- Policy OS-C.6: The County shall accept California Land Conservation (Williamson Act) contracts on land identified by the State as containing significant mineral deposits subject to the use and acreage limitations established by the County.
- Policy OS-C.10: The County shall not permit land uses that threaten the future availability of mineral resource or preclude future extraction of those resources.
- Policy OS-C.18: The County shall establish procedures to ensure that exploration and recovery of mineral resources, including oil and natural gas, will occur under appropriate locational and operational standards within areas designated Agriculture and Westside Rangeland.

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 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: No known mineral resources are in the region. The Project Site is not designated under the City's or County's General Plan as an important mineral resource recovery Site. Therefore, the proposed Project would not result in the loss of availability of known regionally or locally important mineral resources. There is *no impact.*

XIII. NOISE

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

Environmental Setting

Noise is often described as an 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 Reedley General Plan: The Noise Element of the City of Reedley 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 NE 6.1A: To protect the citizens of the City from potentially harmful effects due to exposure to excessive noise.
  - Policy NE 6.1.2: In order to maintain an acceptable noise environment, the following maximum acceptable noise levels should be established for various land use designations.

ALLOWABLE TRANSPORTATION SOURCE NOISE EXPOSURE		
	Noise Sensitive Land Uses	**New Transportation Noise Sources**
Indoor	45	45
Outdoor	60	60
This table is applicable to noise sources created by either new development and/or new transportation Projects. Based on an evaluation of the existing condition and proposed Project, the Community Development Director may allow exterior exposure up to 65 dB DNL where practical application of construction practices mitigate exterior noise exposure.		

Table 3-13: Transportation Noise Standards, Source: Reedley General Plan, Table 6.1.2-A

ALLOWABLE STATIONARY SOURCE NOISE EXPOSURE		
	Daytime (7:00 a.m. to 10:00 p.m.)	**Nighttime (10:00 p.m. to 7 a.m.)**
Hourly Leq, dBA	55	50
Maximum Level, dBA	70	65
1. As determined within outdoor activity areas of existing or planned noise-sensitive uses, if outdoor activity area locations are unknown, the allowable noise exposure shall be determined at the property line of the noise sensitive use. 2. Based on an evaluation of the existing condition and proposed Project, the Community Development Director may allow exterior exposure up to 65 dB DNL where practical application of construction practices mitigate exterior noise exposure.		

Table 3-14: Transportation Noise Standards Source: Reedley General Plan, Table 6.1.2-B

- Policy NE 6.1.3: Areas subject to a DNL greater than 60 dBA are identified as noise impact zones. As part of the special permit process the proposed development Project will be required to have an acoustical analysis prepared by a license engineer. The report should also include practical and reasonable mitigation measures. 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.
- Policy NE 6.1.4: Within noise impact zones, the City will evaluate the noise impact on development proposals. Mitigating measures, including but not limited to the following, may be required:
    a) Setbacks, berms, and barriers.
    b) Acoustical design of structures.
    c) Location of structures.
- Policy NE 6.1.5: Design of all proposed development should incorporate features necessary to minimize adverse noise impacts, while also minimizing effects on surrounding land uses.
- Policy NE 6.1.6: Land use and transportation planning should include analysis of the potentially adverse noise levels associated with various design and use alternatives.
- Policy NE 6.1.7: The design of proposed transportation facility should incorporate feasible measures to diminish potential increases in noise levels.

- Policy NE 6.1.8: To relieve excessive noise generation associated with various modes of transportation, the City should:
    a) Designate truck routes where appropriate (see Circulation Element).
    b) Limit vehicle speed where appropriate.
    c) Adoption of State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC) concerning interior noise exposure for new single, multi-family housing, hotels and motels.
    d) Encourage appropriate authorities to stringently enforce California Motor Vehicle Code standards relating to noise emission levels and muffler systems.
    e) Maintain awareness of State and Federal standards or legislation relating to noise and lend support or criticism as appropriate.
- Policy NE 6.1.9: The City should cooperate with Fresno County to adopt compatible noise control programs.
- Policy NE 6.1.10: The City should develop noise contours for the following facilities:
    a) Major roads classified in the Circulation Element of the General Plan.
    b) Stationary facilities which emit noise levels greater than DNL of 60 dBA.

Fresno County General Plan:

- Goal HS-G: To protect residential and other noise-sensitive uses from exposure to harmful or annoying noise levels; to identify maximum acceptable noise levels compatible with various land use designations; and to develop a policy framework necessary to achieve and maintain a healthful noise environment.
    - Policy HS-G.1: The County shall require that all proposed development incorporate design elements necessary to minimize adverse noise impacts on surrounding land uses.
    - Policy HS-G.2: The County shall require new roadway improvement Projects to achieve and maintain the normally acceptable noise levels shown in Chart HS-1: "Land Use Compatibility for Community Noise Environments."
    - Policy HS-G.3: The County shall allow the development of new noise-sensitive land uses (which include, but are not limited to, residential neighborhoods, schools, and hospitals) only in areas where existing or Projected noise levels are "acceptable" according to the Chart HS-1: "Land Use Compatibility for Community Noise Environments." Noise mitigation measures may be required to reduce noise in outdoor activity areas and interior spaces to these levels.
    - Policy HS-G.4: So that noise mitigation may be considered in the design of new Projects, the County shall require an acoustical analysis as part of the environmental review process where:
        a) Noise sensitive land uses are proposed in areas exposed to existing or Projected noise levels that are "generally unacceptable" or higher according to the Chart HS-1: "Land Use Compatibility for Community Noise Environments;"
        b) Proposed Projects are likely to produce noise levels exceeding the levels shown in the County's Noise Control Ordinance at existing or planned noise-sensitive uses.

- Policy HS-G.5: Where noise mitigation measures are required to achieve acceptable levels according to land use compatibility or the Noise Control Ordinance, the County shall place emphasis of such measures upon Site planning and Project design. These measures may include, but are not limited to, building orientation, setbacks, earthen berms, and building construction practices. The County shall consider the use of noise barriers, such as soundwalls, as a means of achieving the noise standards after other design-related noise mitigation measures have been evaluated or integrated into the Project.
- Policy HS-G.6: The County shall regulate construction-related noise to reduce impacts on adjacent uses in accordance with the County's Noise Control Ordinance.
- Policy HS-G.7: Where existing noise-sensitive uses may be exposed to increased noise levels due to roadway improvement Projects; the County shall apply the following criteria to determine the significance of the impact:
    a) Where existing noise levels are less than 60 dBLdn at outdoor activity areas of noise-sensitive uses, a 5 dBLdn increase in noise levels will be considered significant.
    b) Where existing noise levels are between 60 and 65 dBLdn at outdoor activity areas of noise-sensitive uses, a 3 dBLdn increase in noise levels will be considered significant;
    c) Where existing noise levels are greater than 65 dBLdn at outdoor activity areas of noise-sensitive uses, a 1.5 dBLdn increase in noise levels will be considered significant.

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 13 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 3-15. Noise levels of noise-generating construction equipment. Source: Federal Highway Administration Construction Noise Handbook.

The City of Reedley General Plan and Noise Ordinance does not identify noise thresholds for sources related to construction, however the Project will utilize 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 within the acceptable daily construction hours of Monday through Friday between 7:00 AM and 5:00 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 Reedley Noise Standards, which restricts hours of operation for noise-generating activities between 7:00 AM and 10:00 PM. The single-family residences located immediately north and adjacent the Project Site boundary are the closest sensitive receptors to the Project. There are no nearby roads or highways producing excess noise in the area. 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 Reedley 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. The Reedley Municipal Airport is the nearest public airport and is located approximately 3.5 miles away from the proposed Project Site. There is *no impact*.

XIV. POPULATION AND HOUSING

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

Environmental Setting

The United States Census Bureau estimated the population in the City of Reedley to be 25,232 persons in 2021. This population increased from the 2010 census, which counted a population of 24,373. Factors that influence population growth include job availability, housing availability, and the capacity of existing infrastructure.

Regulatory Setting

The development code and Land Use Element of the General Plan controls the population size in the City of Reedley. 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 Neighborhood Commercial and is zoned CN - Neighborhood Commercial. No residences are permitted within these land use designations.

City of Reedley General Plan: The *Land Use Element* provides the following goals and policies about population growth and infrastructure:

Urban Growth Management

- Goal LU 2.5D: Designate growth areas that can be served by existing and planned infrastructure.
  - Policy LU 2.5.12: New urban development should occur in an orderly manner with initial development occurring on the available undeveloped properties within the City's limits which would be considered in-fill, by-passed parcels or in parcels in close proximity to the urban core, places of employment and established neighborhoods.
  - Policy LU 2.5.13: The City should promote and provide urban services to development within the City as a means of controlling and directing growth.
  - Policy LU 2.5.17: The City shall propose plan areas and zone districts that can accommodate mixed use planning that will provide a combination of residential, commercial services and employment opportunities all within close proximity.

- Policy Goal LU 2.6D: The City shall prepare and implement a policy that supports and encourages infill development for vacant/undeveloped or by-passed parcels within the existing urban area.

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 Reedley to be 25,232 persons in 2021. 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.*

XV. PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable serve ratios, response times of other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☑	☐
b. Police protection?	☐	☐	☑	☐
c. Schools?	☐	☐	☑	☐
d. Parks?	☐	☐	☑	☐
e. Other public facilities?	☐	☐	☑	☐

Environmental Setting

Fire: The City of Reedley Fire Department (RFD) serves the Project Site. The RFD will continue to provide fire protection services to the proposed Project Site upon development. The Fire Department operates out of a station located at 1060 D Street and has jurisdiction over all areas within the City limits. The Fire Department is staffed by one fire chief, three full-time employees, and 40 trained volunteer firefighters.

Police: Law enforcement services are provided to the Project Site via the Reedley Police Department. The City of Reedley will continue to provide police protection services to the proposed Project Site upon development. The Reedley PD headquarters is located at 864 G Street.

Schools: The proposed Project Site is within the Kings Canyon Joint Unified School District. Within the City are five elementary schools, two K-8 schools, two middle schools, one high school, and four other education school facilities. The nearest school, Thomas Law Reed Elementary School, is one mile south of the Project Site.

Regulatory Setting

City of Reedley General Plan: School Districts in the City of Reedley are regulated by the California Department of Education, and the California Department of Justice regulates the Reedley Police Department. Objectives and Policies relating to Fire Protection, Law Enforcement, Parkland, and School Facilities are included in the *Land Use and Safety Elements* of Reedley's General Plan. The following Goals and Policies potentially applicable to the proposed Project are as follows:

Other Land Use

- Goal LU 2.7R: Provide sites for adequate public facilities to serve Projected growth.

- Goal LU 2.7S: Provide for the timely and economically efficient development of all public services and facilities necessary for Reedley's planned urban growth.
- Goal LU2.7T: Public facilities shall complement and support the creation of livable neighborhoods.
  - LU 2.7.64 Provide in accordance with policies of the Open Space, Conservation, and Recreation Element, park, recreation facilities and open space.
  - LU 2.7.66 The planning area shall contain parks, schools, trails, retention basins and other public improvements deemed appropriate.
  - LU 2.7.67 Planned unit development may be permitted in areas planned for public or institutional uses.
  - LU 2.7.68 The City shall coordinate with other public agencies to facilitate the proper location and design of public improvements.
  - LU 2.7.69 Subdivision developments shall provide open space for pocket parks.
  - LU 2.7.71 Retention basins shall be developed at appropriate locations to help recharge the groundwater basin. If properly designed, retention basins can also function as local parks.
  - LU 2.7.72 Update the water, wastewater and storm drainage master plans, and other master plans related to infrastructure development on a periodic basis of no less than five years.
  - LU 2.7.73 Maintain adequate facilities to accommodate sewage disposal for both existing residents and future development.
  - LU 2.7.74 Maintain adequate facilities for water and storm drain service to service existing residents and future development.

Fire Hazards

- Goal SE 5.0A: Prevent and minimize personal injury and loss of life due to natural and manmade hazards.
- Goal SE 5.0B: Prevent and minimize the potential for property damage.
- Goal SE 5.0C: Protect the City and its residents from avoidable loss resulting from improper development in hazardous areas.
- Goal SE 5.0D: Safeguard public safety and property by educating and involving the public in all the tenets of community-oriented policing and problem solving, thereby, reducing crime.
- Goal SE 5.0E: Prevent and minimize personal injury and loss of life and thereby reducing liability issues relating to open canals in urban areas by requiring such open canals to be pipelined subject to urban development projects.

Police Protection

- Goal SE 5.5A: Protect the citizens of Reedley by preventing criminal activity, enforcing laws, and meet community police service demands.
  - Policy SE 5.5.1: Actively involves citizens in crime prevention and public safety awareness through programs such as Neighborhood Watch and Community Oriented Policing and Problem Solving (COPPS).
  - Policy SE 5.5.2: Ensure that the Police Department has the necessary personnel to protect the citizens of Reedley.
  - Policy SE 5.5.3: Strive to maintain a ratio of 1.5 officers per 1,000 citizens.
  - Policy SE 5.5.5: Maintain effective disaster response plans that address emergency response and traffic control and security of damaged areas.

- Policy SE 5.5.6: Maintain the Community Facilities District as a way to adequately fund additional officers and equipment to service new development.

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 Reedley Fire Department will provide fire protection services to the proposed development. The closest fire station is the headquarters, located approximately 1.4 miles south of the Project Site at 1060 D Street. The new commercial development must comply with Title 24 of the California Building Code, which requires all new commercial buildings to have adequate fire suppression facilities. Before the issuance of a building permit, the Project will pay development impact fees to contribute towards necessary fire protection equipment or facilities. According to the City of Reedley Master Fee Schedule adopted through Resolution No. 2023-021, the current fee is $196.38 per 1,000 square feet. This Project would consist of approximately 16,200 square feet of building area, which means the project applicant(s) will pay a minimum of $3,181.35 in fees for fire protection.

The timing of when new fire service equipment or 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 on 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 to identify and mitigate potential environmental impacts. Therefore, the impact is *less than significant.*

b. Police protection?

Less than Significant Impact: The Reedley Police Department will provide services to the proposed development. The nearest station is approximately 2.1 miles south of the proposed Project Site.

The 4-acre commercial development would increase the demand for police coverage. However, the Project would compensate for the increased demand for law enforcement services by paying the appropriate development fees based on the City's adopted fee calculations. According to the City of Reedley Master Fee Schedule adopted through Resolution No. 2023-021, the current fee is $22.41 per 1,000 square feet. This Project would consist of approximately 16,200 square feet of building area, which means the project applicant(s) will pay a minimum of $363.04 in fees for police protection.

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 to identify and mitigate potential environmental impacts. Therefore, the impact is *less than significant*.

c. Schools?

No Impact: The proposed Project is within the Kings Canyon School District. The Project does not propose any new residences and would, therefore, not increase the number of students in the School District. However, the Project would be required to pay for school facilities fees. The current fee from the State Allocation Board is $0.78 per square foot. This Project would consist of approximately 16,200 square feet of building area, which means the project applicant(s) will pay a minimum of $12,636 in fees to help fund local schools. 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. Still, the Project pays the appropriate development fees based on the City's adopted fee calculations. According to the City of Reedley Master Fee Schedule adopted through Resolution No. 2023-021, the current fee is $1,214.77 per 1,000 square feet. This Project would consist of approximately 16,200 square feet of building area, which means the project applicant(s) will pay a minimum of $19,679.27 in fees for parks and recreational facilities. 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 ($1,918.97 per 1,000 square feet), water ($1,787.86 per 1,000 square feet), wastewater ($1,099.35 per 1,000 square feet), storm drainage ($1,339.31 per 1,000 square feet), and general governmental services ($12.88 per 1,000 square feet). The Project will pay $31,087 to offset transportation improvements, $28,963 to offset water services, $17,809 to offset wastewater services, $21,697 to offset storm drainage improvements and $209 to pay for general governmental services.

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 to identify and mitigate potential environmental impacts. Therefore, the impact is *less than significant*.

XVI. PARKS AND RECREATION

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

Environmental Setting

There are six parks that are owned and operated by The City of Reedley. Citizens Park is the closest recreational area to the Project Site and is located approximately one mile southeast of the Project Site.

Regulatory Setting

City of Reedley General Plan: The *Conservation and Open Space Element* of the City of Reedley 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 Reedley residents, which are outlined in the following goal and policies.

Parks and Recreation

- COSP 4.18A: Facilitate greater community connectivity with recreation, parks, and programs in Reedley through the development of an integrated system of trails, bikeways, parks and open space.
- COSP 4.18C: Provide park and recreation facilities within close proximity to residents they are intended to serve.
  - Policy COSP 4.18.1: Provide adequate parks facilities distributed throughout the City to provide organized and informal recreation opportunities and open space for Reedley residents.
  - Policy COSP 4.18.11: Establish priorities for the development of planned parks based on anticipated community need and acquire and develop the proposed park sites in accordance with these priorities.

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.*

XVII. TRANSPORTATION

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

Environmental Setting

Vehicular Access: Vehicular access to the Project is available via Frankwood Avenue and South Street. Frankwood Avenue is designated as an arterial street, and South Street is designated as a major arterial. Frankwood Avenue provides Reedley with a route to the north, which can be used to access Highway 180 and the Reedley Municipal Airport. South Avenue provides a route between Reedley and the City of Orange Cove to the east. These streets have already been improved by the development of surrounding homes, including new and relocated utilities. The eastern half of Frankwood Avenue was expanded from a 30' ROW to a 42' ROW and has been built out to include a bike lane, sidewalk, landscaping, and lighting. The northern half of South Avenue was expanded from a 30' ROW to a 53' ROW, including a bike lane, sidewalks, landscaping, and lighting. The intersection will remain a 4-way stop. The Project includes a drive aisle to access all parking spaces on the site.

Parking: Workers will use temporary construction staging areas to park vehicles and equipment during construction. The Project will include 100 parking spaces and a minimum of four handicap spaces, consistent with the City of Reedley standards.

Pedestrian and Cyclist Connectivity: The Project proposes to dedicate land to expand the ROW of Frankwood Ave and South Street along the western and southern property boundary. This allowed both streets to include sidewalks in the ROW, connecting to sidewalks in the surrounding single-family residential development. Additionally, both streets feature Class II bicycle lanes. Cyclists using this route could utilize vehicular travel lanes 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) guides 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 increase or decrease VMT, depending on previously existing retail travel patterns." The Technical Advisory's recommended significance threshold for retail Projects is stated: "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 the 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."

2022 Regional Transportation Plan: The Fresno Council of Governments (FCOG) created the Regional Transportation Plan (RTP) for Fresno County to address the mobility needed to keep regions moving and communities connected. The Regional Transportation Plan (RTP) charts regional transportation's long-range vision through 2046. As we address new requirements for reducing greenhouse gas emissions, it continues to be Fresno COG's goal to plan in partnership with communities throughout the region, providing transportation choices that enhance residents' quality of life.

Reedley Bicycle and Pedestrian Mobility Plan: This City of Reedley Bicycle and Pedestrian Mobility Plan (Mobility Plan) has been prepared to reflect goals, objectives, and policies and existing and future bikeway and pedestrian systems referenced in the 2010 City of Reedley Bicycle Transportation Plan (BTP) and in the Fresno Regional Active Transportation Plan (ATP) prepared by the Fresno Council of Governments (Fresno COG) in 2017.

Reedley Active Transportation and Parkway Master Plan: The Active Transportation and Parkway Master Plan will produce strategies for creating a safe, sustainable, accessible, and equitable active transportation network. Major products that will result from the Reedley Active Transportation and Parkway Master Plan include:

- Improve existing and propose new on-street bikeway networks.
- Explore opportunities to expand the City's trail network, including connections to the Reedley Parkway.
- Identify priority pedestrian improvements.

The Plan will also develop recommendations for additional programs and activities to build upon the success of the Reedley Parkway. The Reedley Active Transportation and Parkway Master Plan will be completed in late 2023.

City of Reedley Improvement Standards: The City of Reedley's Standard Plans (2019) are developed and enforced by the City of Reedley's Engineering Department to guide the development and maintenance of City Roads as well as other city infrastructure, including the sewer system, storm drainage system, landscaping, and water system. The cross-section drawings in the City Improvement Standards dictate the development of roads within the City.

City of Reedley General Plan: The Transportation and Circulation Element of the City of Reedley General Plan contains the acceptable Level of Service (LOS) for roadways and the following goals and policies to maintain an effective transportation system.

Street and Highway Circulation System

- Goal CIR 3.2A: The City will design and maintain a fully integrated local transportation network that provides for the movement of people and goods in an orderly, safe, and efficient manner.
- Goal CIR 3.2B: Maintain a level of service (LOS) of "C" or better.
- Goal CIR 3.2C: Plan and develop a street and highway system so as to maximize its effectiveness while minimizing its cost of construction and maintenance.
- Goal CIR 3.2D: Minimize the adverse impact of streets and highways on adjacent land uses and on the environment of the Planning Area.
- Goal CIR 3.2E: Provide a street and highway system which can accommodate alternative modes of travel.
- Goal CIR 3.2F: Provide a street and highway system which is aesthetically pleasant to the user through the incorporation of landscape buffering on applicable medians and right-of-way.
    - Policy CIR 3.2.1: All street and roadway improvements shall be in conformance with the Circulation Diagram as shown in Figure 3-1.
    - Policy CIR 3.2.2: Apply consistent standards for new street development based on traffic carrying capacity and classification.
    - Policy CIR 3.2.3: The design of major arterials, arterials, collectors, and local streets shall comply with the adopted City of Reedley, Standard Plans and Specifications.
    - Policy CIR 3.2.4: Standards for new street development can be altered or refined through the adoption of a specific plan or planned unit development process, with City Engineer approval when it can be demonstrated that Projected traffic flows can be accommodated.
    - Policy CIR 3.2.11: Major arterials shall provide for through traffic movement on continuous routes with limited direct access to abutting property. Intersections with cross streets are generally at grade and generally spaced a minimum of one-half mile apart.
    - Policy CIR 3.2.12: Arterials provide for through traffic movement on continuous routes, joining major traffic generators, major arterials, and other arterials. Access to abutting property should be controlled and limited.

- Policy CIR 3.2.21: The City should ensure completion of planned arterial and collector streets as they become necessary to serve developing urban areas or unmeet traffic demands of the City by the following:
    a) Adopt a street improvement program based on a needs priority system.
    b) Require dedication and improvement of necessary street facilities as a condition of land development.
    c) Coordinate the street improvement program with other public service facility improvement programs.
    d) Utilize available FCTA, State and Federal funds for street and highway development.
- Policy CIR 3.2.26: Where a portion of the right-of-way of a planned new street lies outside the boundaries of property proposed for development under a subdivision, site plan review, or conditional use permit application, the applicant may be required, depending on the magnitude of the development and the amount of traffic it will generate, to dedicate sufficient right-of-way width to allow for the development of two travel lanes and one shoulder, curb, gutter and planting area.
- Policy CIR 3.2.27: Development resulting in any of the following shall be required, as part of the special permit approval process, to have a licensed engineer complete a traffic impacts study. The scope of that study shall be determined by the City Engineer and paid for by the developer.
    a) 500 vehicle trips per day; or
    b) 250 a.m. or p.m. peak hour trips; or
    c) 25 Percent increase to existing traffic conditions from the development project.

Discussion

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

Less than Significant Impact: The Project consists of a 4.19-acre commercial development that would include the build-out of Frankwood Avenue and South Street and the on-site circulation-related infrastructure improvements, including driveways and an interior drive aisle. 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. As shown in Table 3-16, the Project will not conflict with any Goals or Policies. Therefore, there is *a less than significant impact.*

Table 3-16: Project Compliance with Transportation Policies

Goal, Policy	Compliance
Goal CIR 3.2B: Maintain a level of service (LOS) of "C" or better.	A Traffic Impact Study (TIS) was prepared for this Project and can be found in Appendix E. The TIS states that in 2044, the intersection of Frankwood and South Avenues will have an LOS of "C" at a minimum. This accounts for the existing conditions, the Project, cumulative 2044 volumes, and near-term projects including the surrounding residential development. Additionally, the TIS states that in 2044, the segments of Frankwood Avenue and South Avenue near the Project will have an LOS of "C". *The intersection of Frankwood and South Avenues and the study road segments are currently operating at acceptable levels of service during the peak hours and are expected to continue to operate at acceptable levels of service through the year 2044 with the Project. Warrants for signalization of the intersection of Frankwood and South Avenues are not met.*
Goal CIR 3.2F: Provide a street and highway system which is aesthetically pleasant to the user through the incorporation of landscape buffering on applicable medians and right-of-way.	The project will include landscaping and trees along Frankwood Ave and South Street. Additionally, the Project will plan for a median with trees or landscaping along South Street.
Policy CIR 3.2.3: The design of major arterials, arterials, collectors, and local streets shall comply with the adopted City of Reedley Standard Plans and Specifications.	The streets receiving improvements will follow Reedley's street design.
Policy CIR 3.2.11: Major arterials shall provide for through traffic movement on continuous routes with limited direct access to abutting property. Intersections with cross streets are generally at grade and generally spaced a minimum of one-half mile apart.	South Street will be widened to include an additional westbound lane for efficient traffic movement.
Policy CIR 3.2.12: Arterials provide for through traffic movement on continuous routes, joining major traffic generators, major arterials, and other arterials. Access to abutting property should be controlled and limited.	Frankwood Avenue will be widened to include an additional northbound lane for efficient traffic movement.
Policy CIR 3.2.26: Where a portion of the right-of-way of a planned new street lies outside the boundaries of property proposed for development under a subdivision, site plan review, or conditional use permit application, the applicant may be required, depending on the magnitude of the development and the amount of traffic it will generate, to dedicate sufficient right-of-way width to allow for the development of two travel lanes and one shoulder, curb, gutter and planting area.	The Project is dedicating 1.03 Acres for the ROW.
Policy CIR 3.2.27: Development resulting in any of the following shall be required, as part of the special permit approval process, to have a licensed engineer complete a traffic impacts study. The scope of that study shall be determined by the City Engineer and paid for by the developer. 500 vehicle trips per day; or 250 a.m. or p.m. peak hour trips; or	A VMT analysis has been prepared Appendix E.

25 Percent increase to existing traffic conditions from the development project.	
Mobility Plan Objective: Continue development of a continuous bicycle and pedestrian network linking residential communities with schools, employment areas, shopping centers, and recreational activities.	The Project has bike lanes and sidewalks connecting to nearby residential developments
Mobility Plan Objective: Increase safety by creating bicycle and pedestrian facilities and improving crosswalks and sidewalks for pedestrians.	The project will improve bicycle and pedestrian facilities by connecting to nearby residential developments

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

Less than Significant Impact: A VMT analysis was prepared for this Project and can be found in Appendix E.

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), guides determining a project's transportation impacts. Transportation impacts are identified based on VMT.

Building upon the guidance in the Technical Advisory, on November 10, 2020, the City of Reedley adopted VMT guidelines based on a document by the Fresno Council of Governments (FCOG) entitled *Fresno County SB 743 Implementation Regional Guidelines* dated July 2020 (hereinafter referred to as the City Guidelines).

The City Guidelines indicate that projects with the following characteristics may be presumed to cause a less than significant transportation impact:

- The project involves a local-serving retail space of less than 50,000 square feet.
- The project generates fewer than 500 average daily trips.

Regarding local-serving retail uses, the Technical Advisory states: *"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."*

The City Guidelines indicate that mixed-use projects may be evaluated for each project component independently, or the lead agency may use the predominant land use type for the analysis. The Technical Advisory states: "*Lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g., residential and retail). Alternatively, a lead agency may consider only the project's dominant use. In the analysis of each use, a project should take credit for internal capture. Combining different land uses and applying one threshold to those land uses may result in an inaccurate impact assessment."*

The Project's dominant local-serving retail use (gas station/convenience store) will add retail opportunities into the urban fabric, improve retail destination proximity, shorten trips, and reduce VMT. In addition, the project's retail portion is less than 50,000 square feet in size. Therefore, it is

suggested that the lead agency may presume that the gas station/convenience store portion of the Project will cause a less-than-significant transportation impact. The medical clinic portion of the project will generate fewer than 500 trips per day and, by adding medical opportunities into the urban fabric, will improve medical destination proximity, shorten trips, and reduce VMT. Therefore, it is suggested that the lead agency may presume that the medical clinic portion of the Project will cause a *less than significant* transportation 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 the public right-of-way. 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 Frankwood Avenue or South Street. A drive aisle within the proposed Project property provides complete access to all buildings within the development. The Project would have *no impact* on emergency access.

XVIII. TRIBAL CULTURAL RESOURCES

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

Environmental Setting

Records Search

A Cultural Records Search (Appendix C) was completed by the Southern San Joaquin Valley Information Center (SSJVIC) on February 14, 2023. The search included known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest.

The records search results indicated that no previous cultural resource studies were completed within the Project area. There has been one cultural resource study conducted within a one-half-mile radius. According to the search, there are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, the California Inventory of Historic Resources, or the California State Historic Landmarks.

Native American Heritage Commission and Native American Outreach

The City of Reedley has received interest from one tribe, and they have sent out notification of the proposed project to receive any comments from the tribe.

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

Cultural Resources

- Goal COSP 4.14A: Protect the cultural heritage of Reedley.
  - COSP4.14.1: Archaeological and historical resources shall be protected and preserved to the maximum extent feasible.
  - COSP4.14.4: Protect significant historical and archaeological resources in accordance with the California Environmental Quality Act.
  - COSP4.14.5: Update the City of Reedley inventory of historic and archaeological resources to determine sites or buildings of local, State, or Federal significance.

Fresno County General Plan: The County's General Plan contains the following goals and policies to protect the tribal cultural resources that may be present on or near the proposed Project Site.

- Goal OS-J: To identify, protect, and enhance Fresno County's important historical, archeological, paleontological, geological, and cultural sites and their contributing environment.
  - Policy OS-J.1: The County shall require that discretionary development Projects, as part of any required CEQA review, identify and protect important historical, archeological, paleontological, and cultural sites and their contributing environment from damage, destruction, and abuse to the maximum extent feasible. Project-level mitigation shall include accurate Site surveys, consideration of Project alternatives to preserve archeological and historic resources, and provision for resource recovery and preservation when displacement is unavoidable.
  - Policy OS-J.2: The County shall, within the limits of its authority and responsibility, maintain confidentiality regarding the locations of archeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

- Policy OS-J.3: The County shall solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or sites of cultural importance.

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 CUL-1 and CUL-2 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 CUL-1 and CUL-2 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 CUL-1: Construction shall stop near the find if previously unknown resources are encountered before or during grading activities. A qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavating the finds and evaluating the discoveries following Section 15064.5 of the CEQA Guidelines and the County's General Plan.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoiding or capping, incorporating the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the discovery area until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person capable of providing long-term preservation to allow future scientific study.

Mitigation Measure CUL-2: In the event that human remains are unearthed during the excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings regarding origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and consult with the descendants all reasonable options regarding the descendants' preferences for treatment.

XIX. UTILITIES AND SERVICE SYSTEMS

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

Environmental Setting

According to the Reedley Municipal Service Review (2020), 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, stormwater drainage facilities, water supply, landfill capacity, and solid waste disposal.

Wastewater: Wastewater will be collected and treated at the City's wastewater treatment facility at 1701 West Huntsman Avenue. The City developed a Wastewater Treatment Plant Master Plan Report in 2006 to identify improvements needed. Based on the improvement requirements included in the Wastewater Master Plan, the City recently completed improvements that increased the wastewater treatment plant's capacity to 7.0 million gallons per day (MGD).

Solid Waste: Mid Valley Disposal provides solid waste collection service, which has several service locations in Fresno County. The City of Reedley has an exclusive franchise agreement with Mid Valley Disposal to manage residential and commercial waste, yard waste, and recyclable materials. The City transfers solid waste to the Waste Management-Fresno Transfer Station at 4333 E. Jefferson Avenue in Fresno County. The facility processes the waste; then, it is disposed of at the American Avenue Landfill at 18950 W. American Avenue, approximately 40 miles west of the City of Reedley.

Water: The City of Reedley will provide water services. The City's primary water source is groundwater from the Kings Subbasin. The City of Reedley operates seven active wells, three above-ground storage tanks, and 82 miles of water transmission and distribution mains. 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: Storm Water for the City is managed through 17 storm drainage basins, including 13 outfalls, ten draining directly into the Kings River, and three draining to an Alta Irrigation District drainage canal. The drainage system for the City involves 150,000 feet of pipelines (28 miles), as well as three lift stations and ten storage facilities, seven of which are retention basins throughout the City that collect runoff and rely on infiltration to collect stormwater. As outlined in the City of Reedley Integrated Master Plan for Potable Water, Sanitary Sewer, and Storm Drainage Systems (2014), Reedley 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 more significant than one acre, an SWPPP to manage stormwater generated during 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 the discharges of pollutants to the surface waters of the U.S. Under this program, an NPDES permit is required to discharge pollutants into the Waters of the U.S. There are 350 permitted facilities within the Central Valley Region.

Discussion

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

Less than Significant Impact: The proposed Project will not require extending existing utility services. Existing utilities exist along Frankwood Avenue and South Street. Connecting the Project to these utilities is not anticipated to cause a significant environmental effect because the extension would occur within the right-of-way before street construction to minimize environmental impacts.

Water

The Project would tie into existing water lines along Frankwood Avenue. The Project has already connected to water lines during the construction of street improvements. The total water demand of the proposed Project was estimated using the City of Reedley Water System Master Plan (2014), which states that water demand for commercial land uses approximately 2,840 gallons/day/acre. Based on this information, the proposed 4.19-acre Project will use approximately 11,899 gallons per day (GPD), or 4.3 MG/year. From 2020 to 2025, the City plans to increase the water supply by 156 MG/year. The City would have sufficient groundwater supplies for the Project.

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 Kings Subbasin beyond what is already analyzed in the most current General Plan EIR and Water Management Plan.

Stormwater

All stormwater will be collected and diverted to a retention basin that was developed with a housing subdivision to the north. Calculations for the stormwater basin are found in Appendix B. This basin can accommodate all stormwater produced by the proposed Project. It is not anticipated that new or expanded stormwater facilities would be required.

Wastewater

The proposed Project would tie into the City's sewer system along Frankwood Avenue. The City's system consists of four sewer pump stations, which convey wastewater to the city's main wastewater treatment plant per the Central Valley Regional Water Quality Control Board Waste Discharge Requirements (WDR) Order NO. R5-2002-0186. The City's wastewater treatment plant (WWTP) is used to treat wastewater from the proposed Project and has an estimated capacity of 6.03 million gallons/day (MGD) but treats approximately 1.73 MGD as of 2015. Based on estimates in Table 4-4 in the Water System Master Plan, Neighborhood Commercial uses generate 1,280 gpd/acre of wastewater. The 4.19 Acre Project is estimated to generate approximately 5,363 gallons of wastewater per day, approximately 0.21% of the current dry weather flow of all the land uses in the City. Dry weather flow is the typical wastewater flow in gallons per day when no storm events occur. Furthermore, sewer services for the proposed Project are planned for in the City's Sewer System Master Plan. It is not anticipated that new or expanded wastewater treatment facilities would be required.

Solid Waste

According to the Municipal Service Review, the American Avenue Disposal site has a daily accepting capacity of 2,200 tons per day and, on average, accepts 1,149 tons daily. The American Avenue Disposal site encompasses 440 acres with a maximum capacity of 32,800,000 cubic yards. As of 2019, the American Avenue Disposal site has a remaining capacity of 29.3 million cubic yards and is anticipated to close by 2044. It is not anticipated that new or expanded solid waste facilities will be required. The existing facilities can support the project.

It is not anticipated that the proposed Project will result in the relocation or construction of new or expanded utility facilities. If 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 Reedley upon development. The City's water supply source is comprised of seven wells that extract water from an underground aquifer. According to City's Urban Water Management Plan (2021), the Projected water supply for Reedley in 2030 is 2,051 million gallons, comprised of both groundwater and recycled water.

The total water demand of the proposed Project was estimated using the City of Reedley Integrated Master Plan, which states that the Projected water demand for neighborhood commercial land uses is approximately 2,840 gallons/day/acre. Based on this information, the proposed 4.19-acre Project is expected to use approximately 11,899 gallons per day or 13.3 AFY.

Based on rates of natural recharge, subsurface inflow, and intentional recharge, the City estimated that it can sustainably use up to 5,579 acre-feet of groundwater given conditions in 2030 (2020 UWMP). In 2020, Reedley demanded a total of 1,447 AF of water. The City projects water demands of 1,616 AF in 2025, 1,818 AF in 2030, 2,049 AF in 2035, and 2,316 AF in 2040. There is a sufficient water supply for the project through at least 2040.

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 Water Management Plan. The 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 wastewater treatment plant (WWTP), which has a capacity of 6.0 million gallons/day (MGD) but currently treats approximately 1.73 MGD. Based on estimates in Table 4-4 in the Water System Master Plan, Neighborhood Commercial uses generate 1,280 gpd/acre of wastewater. The 4.19 Acre Project is estimated to generate approximately 5,363 gallons of wastewater per day, approximately 0.21% of the current dry weather flow of all the land uses in the City. 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 WWTP was designed to accommodate this planned growth. Therefore, the Project would not exceed the City's WWTP 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 Mid Valley Disposal, which services the City of Reedley. The impact is less than significant. 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 the sufficient permitted capacity to accommodate the Project's solid waste disposal needs.

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 all applicable federal, state, and local statutes and regulations regarding solid waste disposal, including recycling. Therefore, the proposed Project would have *no impact* on solid waste regulations.

XX. WILDFIRE

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

Regulatory Setting

Definitions:

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

Fresno County Multi-Jurisdictional Hazard Mitigation Plan*:* The Fresno County Multi-Jurisdictional Hazard Mitigation Plan Key Goals and Objectives pertaining to wildfire:

1. Strengthen Non-Native Noxious Weed Control Efforts
2. Improve Alternate Emergency Access Roads
3. Conduct Community Fuel Break Construction and Maintenance on a Landscape Scale
4. Conduct Prescribed Fires
5. Establish a System of Fire Pumper/Tanker Fill Stations and Water Storage
6. Implement a Public Fire Prevention, Survival, and Mitigation Education Program
7. Implement a Biomass Utilization and Dispositioning Program for Excessive Forest and Rangeland Vegetation
8. Partner with U.S. Forest Service to Reduce Fire Risk in Wildland Urban Interface (WUI)

Fresno County Master Emergency Services Plan (2017): The Fresno County Emergency Services Plan provides guidelines regarding disaster preparedness and evacuation planning for Reedley 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 Fresno County Hazard Mitigation Plan and the Fresno County Master Emergency Services Plan. 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 Fresno County Hazard Mitigation Plan identifies the risk of fire within the City of Reedley 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 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.*

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

Discussion

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

Less Than Significant Impact with Mitigation: As discussed in Section 4, Biological Resources, there are several special status species near the project area. However, mitigation measures BIO-1 through BIO-3 reduce the potential to substantially reduce habitats, special species populations, and the range of rare or endangered plant species. With these mitigation measures in place, the project would not substantially degrade the environment or wildlife within the project area.

Based on the findings discussed in Section 5, Cultural Resources, the project site is not known to be archaeologically sensitive. However, this may change due to the possibility of the unanticipated discovery of archaeological resources during ground disturbing activities. Therefore, project construction activities could potentially impact major periods of California history or prehistory. However, implementation of Mitigation Measures CUL-1 and CUL-2 would reduce these potential

impacts to a less than significant level. Implementation of the identified mitigation measures for each respective section would ensure that impacts are *less than significant with mitigation incorporation.*

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

Less Than Significant Impact: CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a Project is significant and whether the effects of the Project are cumulatively considerable. The assessment of the significance of the cumulative effects of a Project must, therefore, be conducted in connection with the effects of past Projects, other current Projects, and probable future Projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc). Impacts would be *less than significant*.

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

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

3.6 MITIGATION MONITORING AND REPORTING PROGRAM

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Project in order to monitor the implementation of the mitigation measures that have been adopted for the Project. This Mitigation Monitoring and Reporting Program (MMRP) has been created based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Frankwood Commons Commercial Project in the City of Reedley.

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 Reedley 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 Reedley.

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1: Pre-construction Surveys. Active raptor nests are protected by the California Fish and Game code Section 3503.5 and the Migratory Bird Treaty Act (MBTA). For this reason, a pre-construction raptor survey is recommended to determine if active nests, specifically for the burrowing owl, are present on the Site. The survey should be conducted by a qualified biologist no more than 30 days before the onset of construction activities, but preferably within 10 days prior to the start of construction. The survey area will encompass the Site and accessible surrounding lands that are considered suitable for nesting birds.	Project Sponsor	Within 30 days prior to the start of construction	City of Reedley	
Mitigation Measure BIO-2: Construction Timing. It is recommended to perform construction activities outside the bird nesting season (February 1 to August 31). If Project activities are proposed during the nesting season, it is recommended that the Project Site or environmental footprint of the Project be surveyed by a qualified biologist for nesting birds to avoid any adverse impacts leading to nest failure or abandonment. If construction activities are proposed to occur during the non-breeding season (September-January), a survey is not required, and no further studies are necessary.	Project Sponsor	Within 30 days prior to the start of construction.	City of Reedley	
Mitigation Measure BIO-3: Avoidance of Active Nests. If the nests are found and considered to be active, construction activities should not occur	Project Sponsor	Ongoing During Construction	City of Reedley	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
within 500 feet of the nests until the young have fledged or a qualified biologist has determined that the nest is no longer active. The biologist will identify a suitable construction-free buffer around the nest, which will be identified with flagging or fencing and will be maintained until the biologist has confirmed that the young have fledged and can forage independently. All nests 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.				
Mitigation Measure CUL-1: Construction shall stop near the find if previously unknown resources are encountered before or during grading activities. A qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavating the finds and evaluating the discoveries following Section 15064.5 of the CEQA Guidelines and the County's General Plan. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoiding or capping, incorporating the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the discovery area until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person capable of providing long-term preservation to allow future scientific study.	Project Sponsor	Ongoing During Construction	City of Reedley	
Mitigation Measure CUL-2: in the event that human remains are unearthed during the excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings regarding origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American	Project Sponsor	Ongoing During Construction	City of Reedley	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and consult with the descendants all reasonable options regarding the descendants' preferences for treatment.				
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 Reedley Engineering Division with evidence of an approved SWPPP prior to issuance of grading permits.	Project Sponsor	Prior to issuance of grading permits.	City of Reedley	
Mitigation Measure HYD-2: To minimize impacts during construction, the Project proponent shall prepare a drainage plan, Prior to	Project Sponsor	Prior to issuance of grading permits.	City of Reedley	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
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 per the City's SWMP and California Stormwater Quality Association's Storm Water Best Management Practices Handbook, and the City Engineer's Technical Specifications and Public Improvement Standards. During the Project's final design, 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 the operation and maintenance of the Project. These measures shall account for the proposed 4.1621 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). 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 City Engineer may also require other necessary BMPs and design features. The Project proponent shall also prepare and submit an Operations and Maintenance Agreement to the City of Reedley for its approval identifying appropriate procedures to ensure that stormwater quality control measures work properly during operations.				

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
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.	Project Sponsor	Prior to issuance of grading permits.	City of Reedley	

3.7 Supporting Information and Sources

1. California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
2. California Building Code
3. California Energy Efficiency Strategic Plan: New Residential Zero Net Energy Action Plan 2015-2020, June 2015
4. California Environmental Protection Agency (CEPA)
5. California Stormwater Pollution Prevention Program (SWPPP)
6. CalFlora Plant Search
7. City Code of Reedley - Chapter 19 Site Plan Review
8. City of Reedley Climate Action Plan
9. City of Reedley General Plan
10. City of Reedley General Plan EIR
11. City of Reedley Urban Water Management Plan (2020)
12. City of Reedley Sewer System Master Plan (2016)
13. City of Reedley Standard Plans (2019)
14. City of Reedley Wastewater Treatment Plant Master Plan (2006)
15. City of Reedley Water Shortage Contingency Plan (2021)
16. City of Reedley Water System Master Plan (2014)
17. City of Reedley Zoning Ordinance
18. CNDDB Listing Descriptions
19. "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
20. FEMA Flood Map Service Center
21. Fresno County General Plan
22. Fresno County Mulit-Jursidictional Hazard Mitigation Plan (2018)
23. Government Code Section 65962.5
24. San Joaquin Valley Air Pollution Control District Mitigation Measures
25. SJVAPCD Regulations and Guidelines
26. Sustainable Groundwater Management Act - Viewer
27. US Census (2014-2018). QuickFacts Reedley city, California.
28. 2022 California Environmental Quality Act (CEQA) Guidelines
29. Reedley Municipal Service Review
30. FCOG Regional Transportation Plan
31. Reedley Bicycle and Pedestrian Mobility Plan

Section 4

List of Preparers

City of Reedley
845 G Street
Reedley, CA 93654

SECTION 4
List of Preparers

Project Title: Frankwood Commons Commercial Village

List of Preparers

4-Creeks Inc.

- David Duda, AICP, GISP
- Nate Antepenko, Assistant Planner

Persons and Agencies Consulted

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

City of Reedley

- Ellen Moore, City Planner

Peters Engineering Group

- John Rowland, PE, TE

Appendix A

CalEEMod Report

Frankwood Commons Commercial Village - Fresno County, Annual

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

Frankwood Commons Commercial Village

Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	11.00	1000sqft	1.96	11,000.00	0
Convenience Market with Gas Pumps	5.22	1000sqft	1.19	5,216.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Established

Construction Phase -

Vehicle Trips -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Consumer Products -

Area Coating -

Energy Use -

Sequestration -

Frankwood Commons Commercial Village - Fresno County, Annual

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

Mobile Land Use Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	0.25	1.96
tblLandUse	LotAcreage	0.12	1.19

2.0 Emissions Summary

Frankwood Commons Commercial Village - Fresno County, Annual

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1841	1.6917	1.9752	3.4100e-003	0.0852	0.0763	0.1615	0.0411	0.0717	0.1127	0.0000	294.9549	294.9549	0.0690	1.0900e-003	297.0053
2025	0.1229	0.0847	0.1378	2.2000e-004	1.5400e-003	3.9100e-003	5.4500e-003	4.1000e-004	3.6500e-003	4.0600e-003	0.0000	19.3855	19.3855	5.0600e-003	3.0000e-005	19.5222
Maximum	**0.1841**	**1.6917**	**1.9752**	**3.4100e-003**	**0.0852**	**0.0763**	**0.1615**	**0.0411**	**0.0717**	**0.1127**	**0.0000**	**294.9549**	**294.9549**	**0.0690**	**1.0900e-003**	**297.0053**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1841	1.6917	1.9752	3.4100e-003	0.0852	0.0763	0.1615	0.0411	0.0717	0.1127	0.0000	294.9546	294.9546	0.0690	1.0900e-003	297.0050
2025	0.1229	0.0847	0.1378	2.2000e-004	1.5400e-003	3.9100e-003	5.4500e-003	4.1000e-004	3.6500e-003	4.0600e-003	0.0000	19.3855	19.3855	5.0600e-003	3.0000e-005	19.5221
Maximum	**0.1841**	**1.6917**	**1.9752**	**3.4100e-003**	**0.0852**	**0.0763**	**0.1615**	**0.0411**	**0.0717**	**0.1127**	**0.0000**	**294.9546**	**294.9546**	**0.0690**	**1.0900e-003**	**297.0050**

Frankwood Commons Commercial Village - Fresno County, Annual

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	0.4029	0.4029
2	4-1-2024	6-30-2024	0.4898	0.4898
3	7-1-2024	9-30-2024	0.4951	0.4951
4	10-1-2024	12-31-2024	0.4954	0.4954
5	1-1-2025	3-31-2025	0.2021	0.2021
		Highest	0.4954	0.4954

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0746	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.1000e-004
Energy	1.0600e-003	9.6800e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	23.3566	23.3566	2.2800e-003	4.4000e-004	23.5459
Mobile	1.0953	1.1018	6.2462	9.3800e-003	0.8669	8.8800e-003	0.8758	0.2319	8.3000e-003	0.2402	0.0000	887.9750	887.9750	0.0945	0.0721	911.8152
Waste						0.0000	0.0000		0.0000	0.0000	27.3003	0.0000	27.3003	1.6134	0.0000	67.6352
Water						0.0000	0.0000		0.0000	0.0000	0.5606	1.0465	1.6071	0.0578	1.3800e-003	3.4619
Total	**1.1710**	**1.1115**	**6.2545**	**9.4400e-003**	**0.8669**	**9.6200e-003**	**0.8765**	**0.2319**	**9.0400e-003**	**0.2410**	**27.8608**	**912.3783**	**940.2391**	**1.7679**	**0.0739**	**1,006.4586**

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0746	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.1000e-004
Energy	1.0600e-003	9.6800e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	23.3566	23.3566	2.2800e-003	4.4000e-004	23.5459
Mobile	1.0798	1.0544	5.9831	8.5800e-003	0.7824	8.2500e-003	0.7906	0.2093	7.7100e-003	0.2170	0.0000	812.0281	812.0281	0.0921	0.0687	834.7986
Waste						0.0000	0.0000		0.0000	0.0000	27.3003	0.0000	27.3003	1.6134	0.0000	67.6352
Water						0.0000	0.0000		0.0000	0.0000	0.5606	1.0465	1.6071	0.0578	1.3800e-003	3.4619
Total	**1.1554**	**1.0640**	**5.9914**	**8.6400e-003**	**0.7824**	**8.9900e-003**	**0.7914**	**0.2093**	**8.4500e-003**	**0.2178**	**27.8608**	**836.4314**	**864.2922**	**1.7655**	**0.0705**	**929.4420**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.33**	**4.27**	**4.21**	**8.47**	**9.75**	**6.55**	**9.71**	**9.75**	**6.53**	**9.63**	**0.00**	**8.32**	**8.08**	**0.14**	**4.57**	**7.65**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/27/2024	2/2/2024	5	5	
2	Grading	Grading	2/3/2024	2/14/2024	5	8	
3	Building Construction	Building Construction	2/15/2024	1/1/2025	5	230	

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

4	Paving	Paving	1/2/2025	1/27/2025	5	18	
5	Architectural Coating	Architectural Coating	1/28/2025	2/20/2025	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,324; Non-Residential Outdoor: 8,108; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Frankwood Commons Commercial Village - Fresno County, Annual

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

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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	3.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0679	0.0458	1.0000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	8.3643	8.3643	2.7100e-003	0.0000	8.4319
Total	**6.6500e-003**	**0.0679**	**0.0458**	**1.0000e-004**	**0.0491**	**3.0700e-003**	**0.0522**	**0.0253**	**2.8300e-003**	**0.0281**	**0.0000**	**8.3643**	**8.3643**	**2.7100e-003**	**0.0000**	**8.4319**

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

3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	9.8000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2793	0.2793	1.0000e-005	1.0000e-005	0.2817
Total	**1.3000e-004**	**8.0000e-005**	**9.8000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2793**	**0.2793**	**1.0000e-005**	**1.0000e-005**	**0.2817**

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					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0679	0.0458	1.0000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	8.3643	8.3643	2.7100e-003	0.0000	8.4319
Total	**6.6500e-003**	**0.0679**	**0.0458**	**1.0000e-004**	**0.0491**	**3.0700e-003**	**0.0522**	**0.0253**	**2.8300e-003**	**0.0281**	**0.0000**	**8.3643**	**8.3643**	**2.7100e-003**	**0.0000**	**8.4319**

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

3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	9.8000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2793	0.2793	1.0000e-005	1.0000e-005	0.2817
Total	**1.3000e-004**	**8.0000e-005**	**9.8000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2793**	**0.2793**	**1.0000e-005**	**1.0000e-005**	**0.2817**

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0681	0.0590	1.2000e-004		2.9000e-003	2.9000e-003		2.6700e-003	2.6700e-003	0.0000	10.4256	10.4256	3.3700e-003	0.0000	10.5099
Total	**6.6500e-003**	**0.0681**	**0.0590**	**1.2000e-004**	**0.0283**	**2.9000e-003**	**0.0312**	**0.0137**	**2.6700e-003**	**0.0164**	**0.0000**	**10.4256**	**10.4256**	**3.3700e-003**	**0.0000**	**10.5099**

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

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.1000e-004	1.3100e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3723	0.3723	1.0000e-005	1.0000e-005	0.3756
Total	**1.7000e-004**	**1.1000e-004**	**1.3100e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3723**	**0.3723**	**1.0000e-005**	**1.0000e-005**	**0.3756**

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					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0681	0.0590	1.2000e-004		2.9000e-003	2.9000e-003		2.6700e-003	2.6700e-003	0.0000	10.4256	10.4256	3.3700e-003	0.0000	10.5099
Total	**6.6500e-003**	**0.0681**	**0.0590**	**1.2000e-004**	**0.0283**	**2.9000e-003**	**0.0312**	**0.0137**	**2.6700e-003**	**0.0164**	**0.0000**	**10.4256**	**10.4256**	**3.3700e-003**	**0.0000**	**10.5099**

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

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.1000e-004	1.3100e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3723	0.3723	1.0000e-005	1.0000e-005	0.3756
Total	**1.7000e-004**	**1.1000e-004**	**1.3100e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3723**	**0.3723**	**1.0000e-005**	**1.0000e-005**	**0.3756**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1685	1.5393	1.8511	3.0900e-003		0.0702	0.0702		0.0661	0.0661	0.0000	265.4672	265.4672	0.0628	0.0000	267.0366
Total	**0.1685**	**1.5393**	**1.8511**	**3.0900e-003**		**0.0702**	**0.0702**		**0.0661**	**0.0661**	**0.0000**	**265.4672**	**265.4672**	**0.0628**	**0.0000**	**267.0366**

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

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0151	4.4200e-003	7.0000e-005	2.2800e-003	1.0000e-004	2.3700e-003	6.6000e-004	9.0000e-005	7.5000e-004	0.0000	6.4936	6.4936	3.0000e-005	9.8000e-004	6.7858
Worker	1.6400e-003	1.0100e-003	0.0125	4.0000e-005	4.5800e-003	2.0000e-005	4.6000e-003	1.2200e-003	2.0000e-005	1.2400e-003	0.0000	3.5526	3.5526	1.0000e-004	1.0000e-004	3.5838
Total	**2.0000e-003**	**0.0161**	**0.0169**	**1.1000e-004**	**6.8600e-003**	**1.2000e-004**	**6.9700e-003**	**1.8800e-003**	**1.1000e-004**	**1.9900e-003**	**0.0000**	**10.0463**	**10.0463**	**1.3000e-004**	**1.0800e-003**	**10.3696**

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	0.1685	1.5393	1.8511	3.0900e-003		0.0702	0.0702		0.0661	0.0661	0.0000	265.4669	265.4669	0.0628	0.0000	267.0363
Total	**0.1685**	**1.5393**	**1.8511**	**3.0900e-003**		**0.0702**	**0.0702**		**0.0661**	**0.0661**	**0.0000**	**265.4669**	**265.4669**	**0.0628**	**0.0000**	**267.0363**

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

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0151	4.4200e-003	7.0000e-005	2.2800e-003	1.0000e-004	2.3700e-003	6.6000e-004	9.0000e-005	7.5000e-004	0.0000	6.4936	6.4936	3.0000e-005	9.8000e-004	6.7858
Worker	1.6400e-003	1.0100e-003	0.0125	4.0000e-005	4.5800e-003	2.0000e-005	4.6000e-003	1.2200e-003	2.0000e-005	1.2400e-003	0.0000	3.5526	3.5526	1.0000e-004	1.0000e-004	3.5838
Total	**2.0000e-003**	**0.0161**	**0.0169**	**1.1000e-004**	**6.8600e-003**	**1.2000e-004**	**6.9700e-003**	**1.8800e-003**	**1.1000e-004**	**1.9900e-003**	**0.0000**	**10.0463**	**10.0463**	**1.3000e-004**	**1.0800e-003**	**10.3696**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8000e-004	6.2300e-003	8.0400e-003	1.0000e-005		2.6000e-004	2.6000e-004		2.5000e-004	2.5000e-004	0.0000	1.1596	1.1596	2.7000e-004	0.0000	1.1664
Total	**6.8000e-004**	**6.2300e-003**	**8.0400e-003**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**1.1596**	**1.1596**	**2.7000e-004**	**0.0000**	**1.1664**

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

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	7.0000e-005	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0278	0.0278	0.0000	0.0000	0.0291
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0151	0.0151	0.0000	0.0000	0.0153
Total	**1.0000e-005**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0430**	**0.0430**	**0.0000**	**0.0000**	**0.0443**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8000e-004	6.2300e-003	8.0400e-003	1.0000e-005		2.6000e-004	2.6000e-004		2.5000e-004	2.5000e-004	0.0000	1.1596	1.1596	2.7000e-004	0.0000	1.1664
Total	**6.8000e-004**	**6.2300e-003**	**8.0400e-003**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**1.1596**	**1.1596**	**2.7000e-004**	**0.0000**	**1.1664**

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

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	7.0000e-005	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0278	0.0278	0.0000	0.0000	0.0291
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0151	0.0151	0.0000	0.0000	0.0153
Total	**1.0000e-005**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0430**	**0.0430**	**0.0000**	**0.0000**	**0.0443**

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3800e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.3800e-003**	**0.0678**	**0.1096**	**1.7000e-004**		**3.1700e-003**	**3.1700e-003**		**2.9300e-003**	**2.9300e-003**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

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

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.8000e-004	3.6600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.0901	1.0901	3.0000e-005	3.0000e-005	1.0992
Total	**4.8000e-004**	**2.8000e-004**	**3.6600e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.0901**	**1.0901**	**3.0000e-005**	**3.0000e-005**	**1.0992**

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	7.3800e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.3800e-003**	**0.0678**	**0.1096**	**1.7000e-004**		**3.1700e-003**	**3.1700e-003**		**2.9300e-003**	**2.9300e-003**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

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

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.8000e-004	3.6600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.0901	1.0901	3.0000e-005	3.0000e-005	1.0992
Total	**4.8000e-004**	**2.8000e-004**	**3.6600e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.0901**	**1.0901**	**3.0000e-005**	**3.0000e-005**	**1.0992**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.1143**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

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

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0545	0.0545	0.0000	0.0000	0.0550
Total	**2.0000e-005**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0545**	**0.0545**	**0.0000**	**0.0000**	**0.0550**

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	0.1127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.1143**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

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

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0545	0.0545	0.0000	0.0000	0.0550
Total	**2.0000e-005**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0545**	**0.0545**	**0.0000**	**0.0000**	**0.0550**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0798	1.0544	5.9831	8.5800e-003	0.7824	8.2500e-003	0.7906	0.2093	7.7100e-003	0.2170	0.0000	812.0281	812.0281	0.0921	0.0687	834.7986
Unmitigated	1.0953	1.1018	6.2462	9.3800e-003	0.8669	8.8800e-003	0.8758	0.2319	8.3000e-003	0.2402	0.0000	887.9750	887.9750	0.0945	0.0721	911.8152

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	3,255.83	3,255.83	3255.83	1,746,439	1,576,162
Medical Office Building	382.80	94.27	15.62	565,894	510,719
Total	3,638.63	3,350.10	3,271.45	2,312,334	2,086,881

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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market with Gas Pumps	0.521458	0.053308	0.175656	0.151963	0.025001	0.006656	0.014407	0.022718	0.000702	0.000287	0.023515	0.001463	0.002865
Medical Office Building	0.521458	0.053308	0.175656	0.151963	0.025001	0.006656	0.014407	0.022718	0.000702	0.000287	0.023515	0.001463	0.002865

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	12.8192	12.8192	2.0700e-003	2.5000e-004	12.9460
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	12.8192	12.8192	2.0700e-003	2.5000e-004	12.9460
NaturalGas Mitigated	1.0600e-003	9.6800e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5373	10.5373	2.0000e-004	1.9000e-004	10.5999
NaturalGas Unmitigated	1.0600e-003	9.6800e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5373	10.5373	2.0000e-004	1.9000e-004	10.5999

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market with Gas Pumps	55341.8	3.0000e-004	2.7100e-003	2.2800e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.9533	2.9533	6.0000e-005	5.0000e-005	2.9708
Medical Office Building	142120	7.7000e-004	6.9700e-003	5.8500e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5841	7.5841	1.5000e-004	1.4000e-004	7.6291
Total		**1.0700e-003**	**9.6800e-003**	**8.1300e-003**	**6.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**10.5373**	**10.5373**	**2.1000e-004**	**1.9000e-004**	**10.5999**

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					
Convenience Market with Gas Pumps	55341.8	3.0000e-004	2.7100e-003	2.2800e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.9533	2.9533	6.0000e-005	5.0000e-005	2.9708
Medical Office Building	142120	7.7000e-004	6.9700e-003	5.8500e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5841	7.5841	1.5000e-004	1.4000e-004	7.6291
Total		**1.0700e-003**	**9.6800e-003**	**8.1300e-003**	**6.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**10.5373**	**10.5373**	**2.1000e-004**	**1.9000e-004**	**10.5999**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market with Gas Pumps	41310.7	3.8222	6.2000e-004	7.0000e-005	3.8600
Medical Office Building	97240	8.9970	1.4600e-003	1.8000e-004	9.0860
Total		**12.8192**	**2.0800e-003**	**2.5000e-004**	**12.9460**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market with Gas Pumps	41310.7	3.8222	6.2000e-004	7.0000e-005	3.8600
Medical Office Building	97240	8.9970	1.4600e-003	1.8000e-004	9.0860
Total		**12.8192**	**2.0800e-003**	**2.5000e-004**	**12.9460**

6.0 Area Detail

Frankwood Commons Commercial Village - Fresno County, Annual

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

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0746	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.1000e-004
Unmitigated	0.0746	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.1000e-004

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.1000e-004
Total	**0.0746**	**0.0000**	**1.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**0.0000**	**3.1000e-004**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.1000e-004
Total	**0.0746**	**0.0000**	**1.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**0.0000**	**3.1000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.6071	0.0578	1.3800e-003	3.4619
Unmitigated	1.6071	0.0578	1.3800e-003	3.4619

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market with Gas Pumps	0.386659 / 0.236984	0.3930	0.0126	3.0000e-004	0.7993
Medical Office Building	1.38029 / 0.262912	1.2141	0.0451	1.0800e-003	2.6626
Total		**1.6071**	**0.0577**	**1.3800e-003**	**3.4619**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market with Gas Pumps	0.386659 / 0.236984	0.3930	0.0126	3.0000e-004	0.7993
Medical Office Building	1.38029 / 0.262912	1.2141	0.0451	1.0800e-003	2.6626
Total		**1.6071**	**0.0577**	**1.3800e-003**	**3.4619**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.3003	1.6134	0.0000	67.6352
Unmitigated	27.3003	1.6134	0.0000	67.6352

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market with Gas Pumps	15.69	3.1849	0.1882	0.0000	7.8905
Medical Office Building	118.8	24.1153	1.4252	0.0000	59.7447
Total		**27.3003**	**1.6134**	**0.0000**	**67.6352**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market with Gas Pumps	15.69	3.1849	0.1882	0.0000	7.8905
Medical Office Building	118.8	24.1153	1.4252	0.0000	59.7447
Total		**27.3003**	**1.6134**	**0.0000**	**67.6352**

9.0 Operational Offroad

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

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

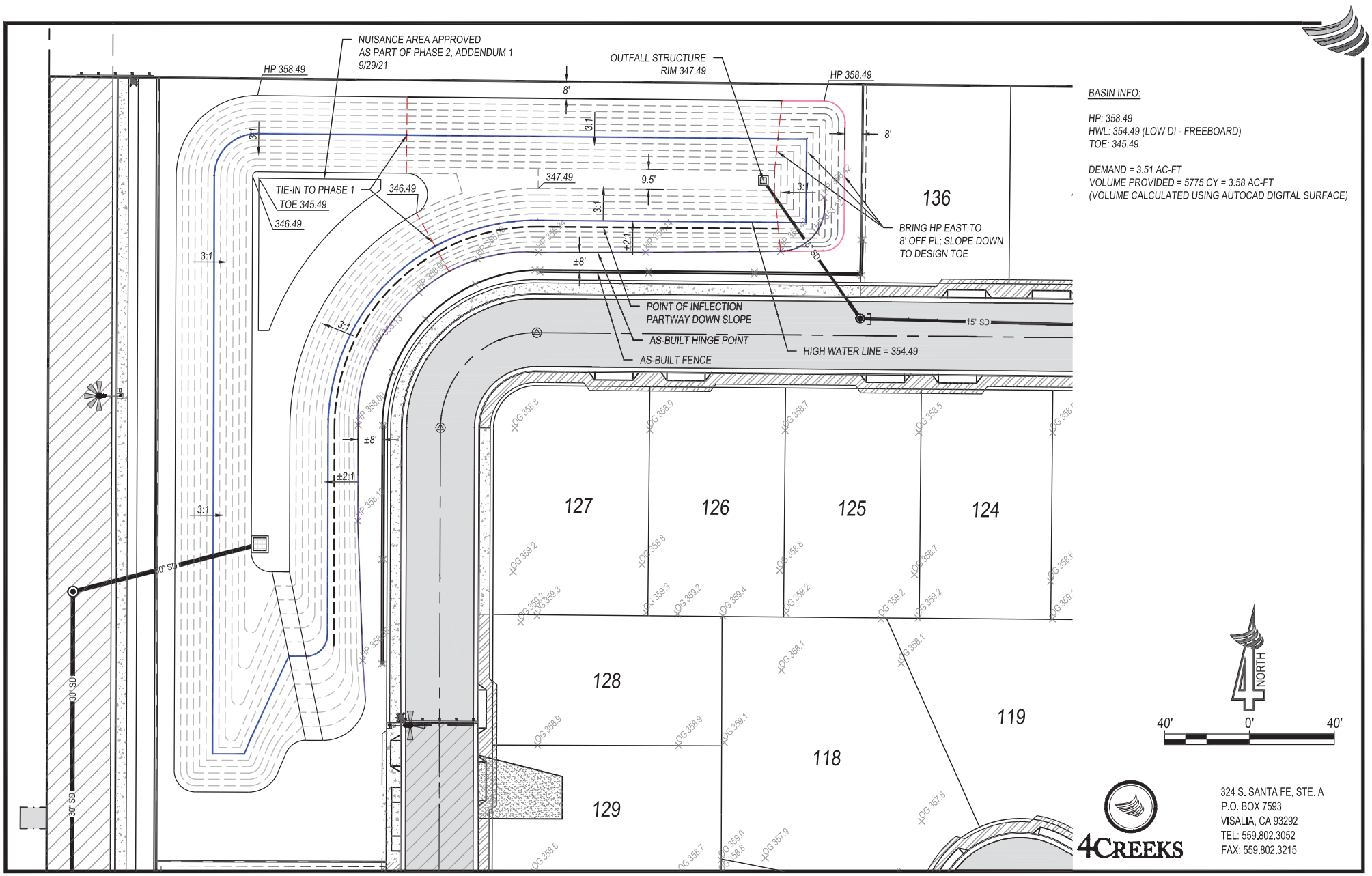
User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Stormwater Basin Design and Calculations


NUISANCE AREA APPROVED
AS PART OF PHASE 2, ADDENDUM 1
9/29/21
OUTFALL STRUCTURE
RIM 347.49
HP 358.49
HP 358.49
8'
3:1
3:1
8'
347.49
9.5'
TIE-IN TO PHASE 1
TOE 345.49
346.49
346.49
3:1
3:1
136
BRING HP EAST TO
8' OFF PL; SLOPE DOWN
TO DESIGN TOE
±2:1
±8'
3:1
POINT OF INFLECTION
PARTWAY DOWN SLOPE
15" SD
AS-BUILT HINGE POINT
AS-BUILT FENCE
HIGH WATER LINE = 354.49
±8'
±2:1
3:1
30" SD
30" SD
30" SD
127
126
125
124
128
129
118
119
BASIN INFO:
HP: 358.49
HWL: 354.49 (LOW DI - FREEBOARD)
TOE: 345.49
DEMAND = 3.51 AC-FT
VOLUME PROVIDED = 5775 CY = 3.58 AC-FT
(VOLUME CALCULATED USING AUTOCAD DIGITAL SURFACE)
NORTH
40'
0'
40'
4CREEKS
324 S. SANTA FE, STE. A
P.O. BOX 7593
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3215

Calculations
for

Storm Drain

At

Frankwood Commons Subdivision

Reedley, CA

Project #19264
August 2020

4CREEKS

324 S. Santa Fe ST., SUITE A
VISALIA, CA 93292
(559) 802-3052

Project:	Frankwood
Job No.	19264
Design By:	RJD
Check By:	SJM

Storm Drain Pipe Design

RUNOFF

Rational Method: $Q = CIA$

Where:

Q = runoff (cfs)
C = runoff coefficient
I = intensity (in/hr) - based on NOAA data (see attached)
A = Area (ac)

Design Parameters

Recurrence Interval:	5	year
Gutter velocity:	2.0	fps

Land Use	C	T_i (min)
Residential	0.25	25
Commercial/Offsite	0.70	5

*Runoff coefficent, C, per 2014 City of Reedley Integrated Master Plan, Table 5-7

PIPE DESIGN

Manning's Eqn: $V = (1.486/n)*(R^{2/3})*(S^{1/2})$

$Q = VA$

Where:

V = Velocity of flow in pipe (fps)
Q = Volume flow in pipe (cfs)
n = Manning's roughness coefficient = 0.013
R = Hydraulic radius = A/P
S = Pipe slope (ft/ft)
A = Area of flow (sf)
P = Wetted perimeter of pipe (ft)
D = Diameter of pipe (in)
d = Depth of flow pipe (in)

Design Parameters

Min. pipe velocity =	2.0	fps
Max. d/D =	0.8	

HGL Calculated in Hydraflow Storm Seweres Extension for Autodesk Civil 3D

Project:	Frankwood
Job No.	19264
Design By:	MJR
Check By:	RJD

Basin Design - Phase 1

RAINFALL

Rainfall volume, V = CIA cf

Depth of rainfall, I = 0.28 ft (5-year, 10-day storm per City Std. SD-7, rev. Oct. 2019)

	C*	A (sf)	A (ac)	V (cf)	V (cy)	V (ac-ft)
Residential	0.25	574959	13.20	40247	1491	0.92
Offsite & Commercial	0.70	271849	6.24	53282	1973	1.22
Open (basin)	0.12	60396	1.39	2029	75	0.05
TOTAL		907204	20.83	95559	3539	2.19

*Runoff coefficent, C, per 2014 City of Reedley Integrated Master Plan, Table 5-7

BASIN CAPACITY

Volume Required = **3539** CY = Volume of Rainfall

Volume Provided = $(1/6)*d*(A_{top}+4A_{mid}+A_{bottom})$

	A_{top} (sf)	A_{mid} (sf)	A_{bottom} (sf)	Grade top*	Grade btm	Depth (ft)	Freeboard (ft)	V (cf)	V (cy)	V (ac-ft)
Hinge Point	33810	18718	6300	358.49	346.49	12.00		229964	8517	5.28
High Water Line	23479	14237	6300	354.49	346.49	8.00	4.00	115636	4283	2.65

*High water line set 0.5' below lowest DI in tributary area

Excess Volume = **744** CY

Project:	Frankwood
Job No.	19264
Design By:	MJR
Check By:	RJD

Basin Design - Ultimate

RAINFALL

Rainfall volume, V = CIA cf

Depth of rainfall, I = 0.28 ft (5-year, 10-day storm per City Std. SD-7, rev. Oct. 2019)

	C*	A (sf)	A (ac)	V (cf)	V (cy)	V (ac-ft)
Residential	0.25	1395495	32.04	97685	3618	2.24
Offsite & Commercial	0.70	271849	6.24	53282	1973	1.22
Open (basin)	0.12	60396	1.39	2029	75	0.05
TOTAL		1727740	39.66	152996	5667	3.51

*Runoff coefficent, C, per 2014 City of Reedley Integrated Master Plan, Table 5-7

BASIN CAPACITY

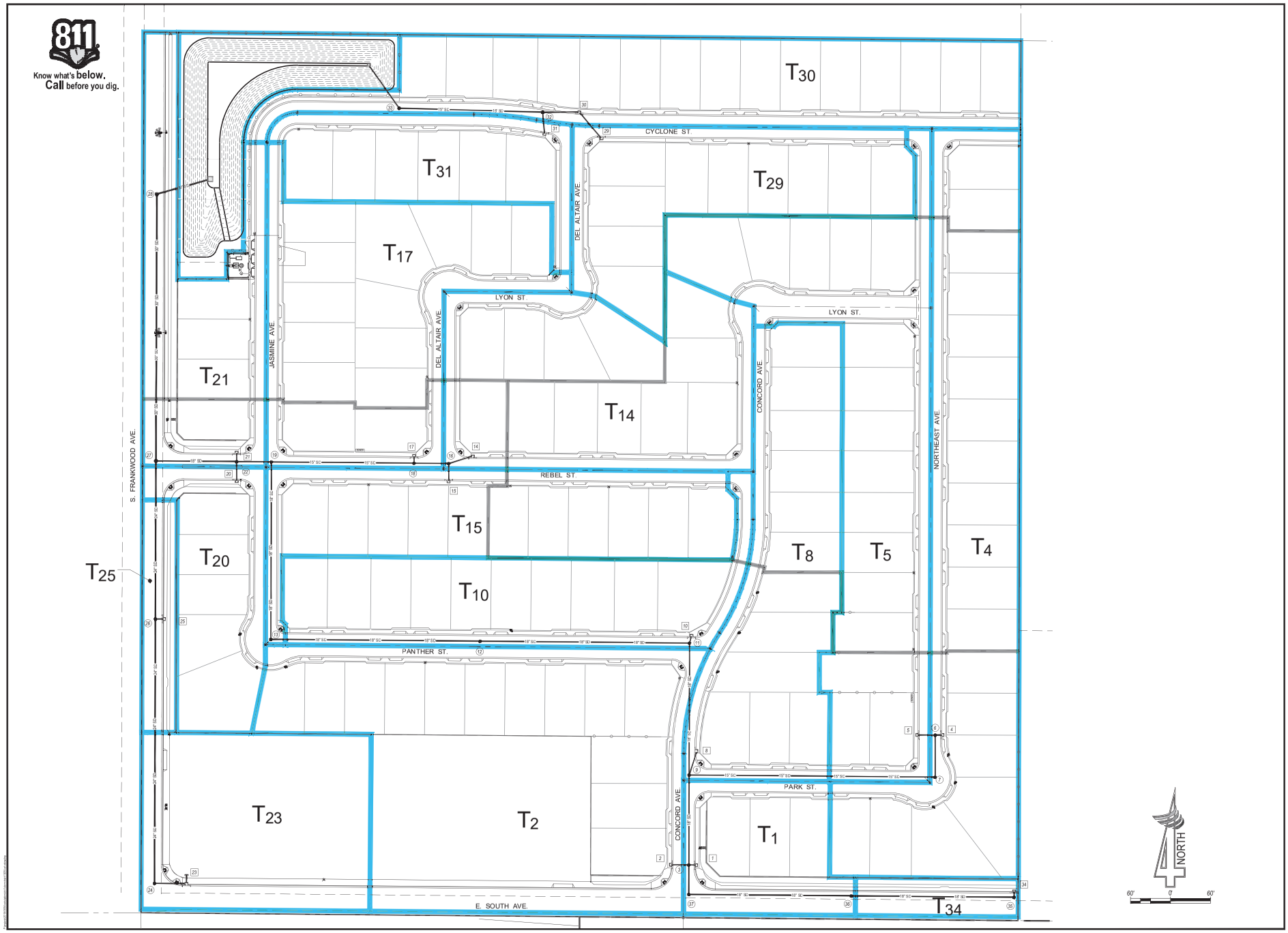
Volume Required = 5667 CY = Volume of Rainfall

Volume Provided = $(1/6)*d*(A_{top}+4A_{mid}+A_{bottom})$

	A_{top} (sf)	A_{mid} (sf)	A_{bottom} (sf)	Grade top*	Grade btm	Depth (ft)	Freeboard (ft)	V (cf)	V (cy)	V (ac-ft)
Hinge Point	46501	25346	7102	358.49	346.49	12.00		309974	11481	7.12
High Water Line	32112	18892	7102	354.49	346.49	8.00	4.00	153043	5668	3.51

*High water line set 0.5' below lowest DI in tributary area

Excess Volume = 2 CY



REVISIONS

DATE	BY	DESCRIPTION

APPROVED BY:

DATE

RYAN J. DOOLEY
PROJECT ENGINEER
RCE 89798

PREPARED BY:

4CREEKS

934 S. SANTA FE ST., STE. A
P.O. BOX 7159
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3219

DRW BY: RD, MR | CHK BY: RM, RD

IMPROVEMENT PLANS FOR:
SAN JOAQUIN VALLEY HOMES
2907 AVENIDA DE LOS ROBLES
VISALIA, CA 93277
559.732.2660

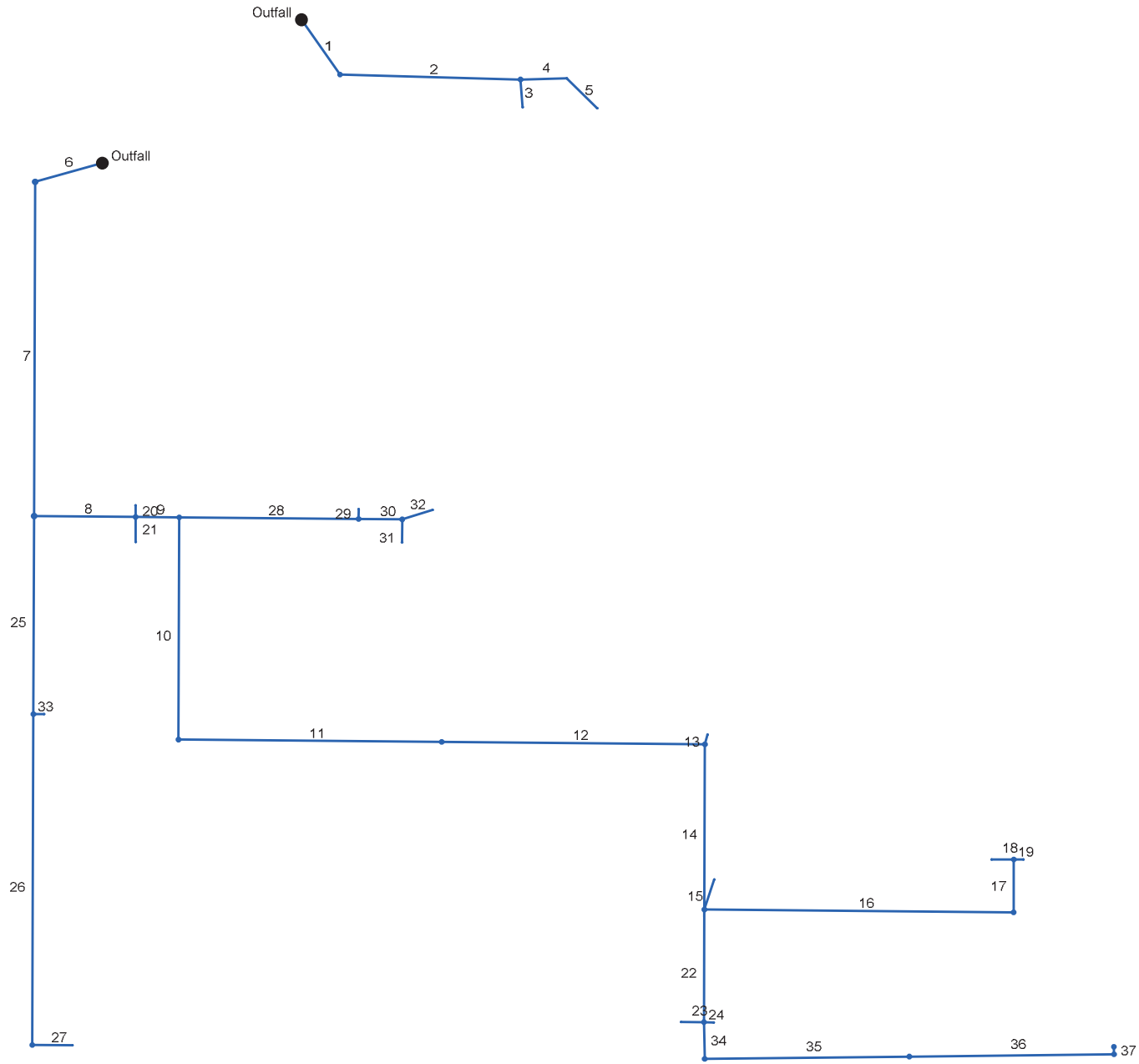
FRANKWOOD COMMONS SUBDIVISION
STORM DRAIN EXHIBIT

PLOT DATE:	Aug 11, 2020
JOB NO.:	19264
FILE NAME:	19264-sd calcs
SCALE:	1" = 60'
SHEET NO.:	1 OF 1

Structure	Tributary								Upstream Structures					Flow				Pipe (Out of Structure)										
Number	Trib. Area (sf)	A (ac)	C	C*A (ac)	T_i (min.)	L_{gutter} (ft)	T_{gutter} (min)	T_c (min)	Number	C*A (ac)	T_c (min)	T_{pipe} (min)	Time to Struct (min)	Total C*A (ac)	T_c (min)	I (in/hr)	Q (cfs)	Size (in)	S_{min} (ft/ft)	Slope (ft/ft)	V (fps)	Length (ft)	T_{pipe} (min)	Q (cfs)	Rim Elev	Upper Inv.	Lower Inv.	HGL
1	46195	1.060	0.30	0.318	25.0	302	2.53	27.53		0.000			0.00	0.318	27.53	0.738	0.235	15	0.0014	0.0087	4.96	12	0.04	5.24	354.99	349.75	349.65	351.52
2	210971	4.843	0.45	2.179	25.0	932	7.81	32.81		0.000			0.00	2.179	32.81	0.667	1.454	15	0.0014	0.0036	3.19	27	0.14	3.37	354.99	349.75	349.65	351.52
3		0.000		0.000			0.00	0.00		2.723			32.95	2.723	32.95	0.666	1.814	18	0.0011	0.0022	2.82	135	0.80	4.29		349.40	349.11	351.30
									1	0.318	27.53	0.04	27.57															
									2	2.179	32.81	0.14	32.95															
									37	0.225	11.15	0.25	11.41															
4	170764	3.920	0.25	0.980	25.0	997	8.35	33.35		0.000			0.00	0.980	33.35	0.663	0.650	15	0.0014	0.0087	4.96	12	0.04	5.24	355.18	351.40	351.30	352.42
5	157940	3.626	0.25	0.906	25.0	947	7.93	32.93		0.000			0.00	0.906	32.93	0.666	0.604	15	0.0014	0.0038	3.28	27	0.14	3.46	355.18	351.40	351.30	352.42
6		0.000		0.000			0.00	0.00		1.887			33.39	1.887	33.39	0.663	1.251	15	0.0014	0.0015	2.06	63	0.51	2.18		350.22	350.12	351.85
									4	0.980	33.35	0.04	33.39															
									5	0.906	32.93	0.14	33.07															
7							0.00	0.00		1.887			33.90	1.887	33.90	0.659	1.243	15	0.0014	0.0018	2.26	369	2.73	2.38		350.02	349.36	351.67
									6	1.887	33.39	0.51	33.90															
8	108494	2.491	0.25	0.623	25.0	657	5.50	30.50		0.000			0.00	0.623	30.50	0.684	0.426	15	0.0014	0.0027	2.76	38	0.23	2.92	355.33	352.09	351.99	353.11
9		0.000		0.000			0.00	0.00		5.232			36.63	5.232	36.63	0.639	3.343	18	0.0013	0.0020	2.68	198	1.23	4.09		349.11	348.71	350.90
									3	2.723	32.95	0.80	33.75															
									7	1.887	33.90	2.73	36.63															
									8	0.623	30.50	0.23	30.73															
10	93442	2.145	0.25	0.536	25.0	609	5.10	30.10		0.000			0.00	0.536	30.10	0.687	0.369	15	0.0014	0.0084	4.87	12	0.04	5.15	355.89	352.15	352.05	353.17
11		0.000		0.000			0.00	0.00		5.768			37.86	5.768	37.86	0.630	3.633	18	0.0016	0.0021	2.75	314	1.90	4.19		348.61	347.96	350.39
									9	5.232	36.63	1.23	37.86															
									10	0.536	30.10	0.04	30.14															
12		0.000		0.000			0.00	0.00		5.768			39.76	5.768	39.76	0.616	3.552	18	0.0015	0.0021	2.75	314	1.90	4.19		347.96	347.30	349.72
									11	5.768	37.86	1.90	39.76															
13		0.000		0.000			0.00	0.00		5.768			41.66	5.768	41.66	0.602	3.471	18	0.0014	0.0019	2.62	266	1.69	3.98		347.20	346.69	348.96
									12	5.768	39.76	1.90	41.66															
14	120076	2.757	0.25	0.689	25.0	634	5.31	30.31		0.000			0.00	0.689	30.31	0.686	0.473	15	0.0014	0.0026	2.71	38	0.23	2.87	355.26	348.80	348.70	350.53
15	96726	2.221	0.25	0.555	25.0	484	4.05	29.05		0.000			0.00	0.555	29.05	0.707	0.393	15	0.0014	0.0036	3.19	27	0.14	3.37	355.15	348.80	348.70	350.53
16		0.000		0.000			0.00	0.00		1.244			30.54	1.244	30.54	0.684	0.851	15	0.0014	0.0020	2.38	52	0.36	2.51		348.54	348.44	350.35
									14	0.689	30.31	0.23	30.54															
									15	0.555	29.05	0.14	29.19															
17	131647	3.022	0.25	0.756	25.0	665	5.57	30.57		0.000			0.00	0.756	30.57	0.684	0.517	15	0.0014	0.0087	4.96	12	0.04	5.24	355.24	348.64	348.54	350.35
18		0.000		0.000			0.00	0.00		2.000			30.91	2.000	30.91	0.681	1.362	15	0.0014	0.0070	4.45	214	0.80	4.70		348.44	346.94	349.95
									16	1.244	30.54	0.36	30.91															
									17	0.756	30.57	0.04	30.61															
19		0.000		0.000			0.00	0.00		7.768			43.36	7.768	43.36	0.589	4.577	18	0.0025	0.0033	3.45	52	0.25	5.25		346.59	346.42	348.27
									13	5.768	41.66	1.69	43.36															
									18	2.000	30.91	0.80	31.71															
20	54723	1.256	0.25	0.314	25.0	313	2.62	27.62		0.000			0.00	0.314	27.62	0.736	0.231	15	0.0014	0.0033	3.05	30	0.16	3.23	355.62	349.57	349.47	350.60
21	79467	1.824	0.44	0.803	25.0	726	6.08	31.08		0.000			0.00	0.803	31.08	0.680	0.546	15	0.0014	0.0071	4.48	14	0.05	4.74	355.62	349.57	349.47	350.59
22		0.000		0.000			0.00	0.00		8.885			43.61	8.885	43.61	0.587	5.218	18	0.0033	0.0055	4.45	121	0.45	6.78		346.42	345.75	347.75
									19	7.768	43.36	0.25	43.61															
									20	0.314	27.62	0.16	27.79															
									21	0.803	31.08	0.05	31.13															
23	93027	2.136	0.70	1.495	5.0	275	2.30	7.30		0.000			0.00	1.495	7.30	1.494	2.234	18	0.0011	0.0021	2.75	48	0.29	4.19	355.36	348.38	348.28	350.36
24		0.000		0.000			0.00	0.00		1.495			7.59	1.495	7.59	1.466	2.191	24	0.0008	0.0040	4.60	396	1.43	12.45		347.78	346.20	349.94
									23	1.495	7.30	0.29	7.59															
25	18112	0.416	0.70	0.291	5.0	178	1.49	6.49		0.000			0.00	0.291	6.49	1.574	0.458	18	0.0011	0.0080	5.37	12	0.04	8.17	355.79	348.69	348.59	349.92
26		0.000		0.000			0.00	0.00		1.786			9.03	1.786	9.03	1.325	2.367	24	0.0008	0.0040	4.60	237	0.86	12.45		346.20	345.25	348.00
									24	1.495	7.59	1.43	9.03															
									25	0.291	6.49	0.04	6.53															
27		0.000		0.000			0.00	0.00		10.671			44.06	10.671	44.06	0.584	6.231	30	0.0006	0.0020	3.77	400	1.77	15.96		344.75	343.95	346.94
									22	8.885	43.61	0.45	44.06															
									26	1.786	9.03	0.86	9.89															
28		0.000		0.000			0.00	0.00		10.671			45.83	10.671	45.83	0.571	6.092	30	0.0006	0.0224	12.63	83	0.11	53.40		343.85	341.99	346.25
									27	10.671	44.06	1.77	45.83															

Structure	Tributary								Upstream Structures					Flow				Pipe (Out of Structure)										
Number	Trib. Area (sf)	A (ac)	C	C*A (ac)	T_i (min.)	L_{gutter} (ft)	T_{gutter} (min)	T_c (min)	Number	C*A (ac)	T_c (min)	T_{pipe} (min)	Time to Struct (min)	Total C*A (ac)	T_c (min)	I (in/hr)	Q (cfs)	Size (in)	S_{min} (ft/ft)	Slope (ft/ft)	V (fps)	Length (ft)	T_{pipe} (min)	Q (cfs)	Rim Elev	Upper Inv.	Lower Inv.	HGL
29	88634	2.035	0.25	0.509	25.0	457	3.83	28.83		0.000			0.00	0.509	28.83	0.712	0.362	15	0.0014	0.0019	2.32	51	0.37	2.45	356.28	350.00	349.90	351.09
30	129915	2.982	0.25	0.746	25.0	662	5.54	30.54		0.509			29.19	1.254	30.54	0.684	0.858	15	0.0014	0.0018	2.26	55	0.41	2.38	356.17	349.80	349.70	350.90
									29	0.509	28.83	0.37	29.19															
31	60390	1.386	0.25	0.347	25.0	414	3.47	28.47		0.000			0.00	0.347	28.47	0.719	0.249	15	0.0014	0.0030	2.91	33	0.19	3.08	356.26	349.90	349.80	350.92
32		0.000		0.000			0.00	0.00		1.601			30.95	1.601	30.95	0.681	1.090	15	0.0014	0.0015	2.06	215	1.74	2.18		349.70	349.38	350.73
									30	1.254	30.54	0.41	30.95															
									31	0.347	28.47	0.19	28.66															
33		0.000		0.000			0.00	0.00		1.601			32.69	1.601	32.69	0.668	1.070	15	0.0014	0.0100	5.32	80	0.25	5.62		344.04	343.24	345.07
									32	1.601	30.95	1.74	32.69															
34	14026	0.322	0.70	0.225	5.0	244	2.04	7.04		0.000			0.00	0.225	7.04	1.520	0.343	18	0.0011	0.0118	6.52	9	0.02	9.93	355.24	350.34	350.24	352.36
35		0.000		0.000			0.00	0.00		0.225			7.07	0.225	7.07	1.517	0.342	18	0.0011	0.0011	1.99	244	2.04	3.03		350.14	349.87	352.20
									34	0.225	7.04	0.02	7.07															
36		0.000		0.000			0.00	0.00		0.225			9.11	0.225	9.11	1.317	0.297	18	0.0011	0.0011	1.99	244	2.04	3.03		349.87	349.60	351.92
									35	0.225	7.07	2.04	9.11															
37		0.000		0.000			0.00	0.00		0.225			11.15	0.225	11.15	1.175	0.265	18	0.0011	0.0023	2.88	44	0.25	4.38		349.50	349.40	351.52
									36	0.225	9.11	2.04	11.15															

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Project File: 19264 Frankwood SD_4.13.20.stm	Number of lines: 37	Date: 8/13/2020

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf		Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf	Ave Sf	Enrgy loss		
	(in)	(cfs)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(%)	(ft)	(K)	(ft)
1	15	6.46	343.24	344.26	1.02	1.08	6.00	0.56	344.82	1.002	80.00	344.04	345.07	1.03**	1.08	5.99	0.56	345.62	0.998	1.000	0.800	0.83	0.46
2	15	2.49	349.38	350.40	1.02*	1.08	2.31	0.08	350.49	0.149	215.28	349.70	350.73	1.03	1.08	2.31	0.08	350.81	0.148	0.149	0.320	1.00	0.08
3	15	3.55	349.80	350.82	1.02*	1.08	3.30	0.17	350.99	0.303	33.00	349.90	350.92	1.02	1.08	3.30	0.17	351.09	0.303	0.303	0.100	1.00	0.17
4	15	2.75	349.70	350.81	1.11	1.15	2.39	0.09	350.90	0.162	55.00	349.80	350.90	1.10	1.14	2.41	0.09	350.99	0.164	0.163	0.090	1.14	0.10
5	15	2.86	349.90	351.00	1.10	1.14	2.50	0.10	351.10	0.176	51.00	350.00	351.09	1.09	1.13	2.52	0.10	351.19	0.179	0.178	0.091	1.00	0.10
6	30	61.34	341.99	344.41	2.42	4.84	12.62	2.49	346.90	0.000	83.14	343.85	346.25	2.40**	4.84	12.66	2.49	348.74	0.000	0.000	n/a	0.97	n/a
7	30	18.34	343.95	346.25	2.30	4.73	3.88	0.23	346.49	0.174	400.00	344.75	346.94	2.19	4.56	4.02	0.25	347.19	0.181	0.177	0.708	1.00	0.25
8	18	7.81	345.75	347.19	1.44	1.75	4.47	0.31	347.51	0.483	121.03	346.42	347.75	1.33	1.66	4.71	0.34	348.10	0.493	0.488	0.591	1.00	0.34
9	18	6.00	346.42	348.10	1.50	1.77	3.40	0.18	348.28	0.327	52.04	346.59	348.27	1.50	1.77	3.40	0.18	348.45	0.327	0.327	0.170	1.00	0.18
10	18	4.60	346.69	348.45	1.50	1.77	2.60	0.11	348.55	0.192	266.00	347.20	348.96	1.50	1.77	2.60	0.11	349.06	0.192	0.192	0.510	1.00	0.11
11	18	4.82	347.30	349.06	1.50	1.77	2.73	0.12	349.18	0.210	313.80	347.96	349.72	1.50	1.77	2.73	0.12	349.84	0.210	0.210	0.660	0.15	0.02
12	18	4.78	347.96	349.74	1.50	1.77	2.71	0.11	349.85	0.207	313.80	348.61	350.39	1.50	1.77	2.70	0.11	350.50	0.207	0.207	0.650	1.00	0.11
13	15	5.93	352.05	353.07	1.02*	1.08	5.51	0.47	353.55	0.843	11.86	352.15	353.17	1.02	1.08	5.51	0.47	353.65	0.844	0.843	0.100	1.00	0.47
14	18	4.72	348.71	350.50	1.50	1.77	2.67	0.11	350.61	0.202	197.78	349.11	350.90	1.50	1.77	2.67	0.11	351.01	0.202	0.202	0.400	1.00	0.11
15	15	3.33	351.99	353.01	1.02*	1.08	3.09	0.15	353.16	0.266	37.63	352.09	353.11	1.02	1.08	3.09	0.15	353.26	0.266	0.266	0.100	1.00	0.15
16	15	2.73	349.36	351.01	1.25	1.23	2.23	0.08	351.09	0.179	368.71	350.02	351.67	1.25	1.23	2.23	0.08	351.75	0.179	0.179	0.660	1.00	0.08
17	15	2.57	350.12	351.75	1.25	1.23	2.09	0.07	351.82	0.158	63.25	350.22	351.85	1.25	1.23	2.09	0.07	351.92	0.158	0.158	0.100	1.00	0.07
18	15	3.97	351.30	352.32	1.02*	1.08	3.68	0.21	352.54	0.377	26.50	351.40	352.42	1.02	1.08	3.69	0.21	352.64	0.378	0.378	0.100	1.00	0.21
19	15	6.02	351.30	352.32	1.02*	1.08	5.59	0.49	352.81	0.869	11.50	351.40	352.42	1.02	1.08	5.60	0.49	352.91	0.871	0.870	0.100	1.00	0.49
20	15	5.46	349.47	350.49	1.02*	1.08	5.07	0.40	350.89	0.714	14.00	349.57	350.59	1.02	1.08	5.07	0.40	350.99	0.714	0.714	0.100	1.00	0.40
21	15	3.73	349.47	350.49	1.02*	1.08	3.46	0.19	350.68	0.333	30.00	349.57	350.60	1.03	1.08	3.46	0.19	350.78	0.333	0.333	0.100	1.00	0.19
22	18	4.87	349.11	351.01	1.50	1.77	2.76	0.12	351.13	0.215	134.71	349.40	351.30	1.50	1.77	2.76	0.12	351.42	0.215	0.215	0.290	1.00	0.12

Project File: 19264 Frankwood SD_4.13.20.stm | Number of lines: 37 | Run Date: 8/13/2020

Notes: * depth assumed; ** Critical depth. ; c = cir e = ellip b = box

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
	(in)	(cfs)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	(ft)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)	(K)	(ft)
23	15	3.89	349.65	351.42	1.25	1.23	3.17	0.16	351.58	0.364	27.50	349.75	351.52	1.25	1.23	3.17	0.16	351.68	0.364	0.364	0.100	1.00	0.16
24	15	6.02	349.65	351.42	1.25	1.23	4.91	0.37	351.80	0.869	11.51	349.75	351.52	1.25	1.23	4.90	0.37	351.90	0.869	0.869	0.100	1.00	0.37
25	24	14.32	345.25	347.19	1.94	3.12	4.59	0.33	347.52	0.354	237.07	346.20	348.00	1.80	2.98	4.80	0.36	348.36	0.352	0.353	0.837	1.00	0.36
26	24	14.29	346.20	348.36	2.00	3.14	4.55	0.32	348.68	0.399	396.00	347.78	349.94	2.00	3.14	4.55	0.32	350.26	0.399	0.399	1.580	1.00	0.32
27	18	4.80	348.28	350.26	1.50	1.77	2.72	0.11	350.38	0.209	47.84	348.38	350.36	1.50	1.77	2.72	0.11	350.48	0.209	0.209	0.100	1.00	0.11
28	15	5.41	346.94	348.45	1.25	1.23	4.41	0.30	348.75	0.702	213.83	348.44	349.95	1.25	1.23	4.41	0.30	350.25	0.702	0.702	1.500	1.00	0.30
29	15	6.02	348.54	350.25	1.25	1.23	4.91	0.37	350.62	0.870	11.50	348.64	350.35	1.25	1.23	4.91	0.37	350.72	0.870	0.870	0.100	1.00	0.37
30	15	2.83	348.44	350.25	1.25	1.23	2.31	0.08	350.33	0.192	52.00	348.54	350.35	1.25	1.23	2.31	0.08	350.43	0.192	0.192	0.100	1.00	0.08
31	15	3.89	348.70	350.43	1.25	1.23	3.17	0.16	350.59	0.364	27.50	348.80	350.53	1.25	1.23	3.17	0.16	350.69	0.364	0.364	0.100	1.00	0.16
32	15	3.32	348.70	350.43	1.25	1.23	2.71	0.11	350.55	0.264	37.82	348.80	350.53	1.25	1.23	2.71	0.11	350.65	0.264	0.264	0.100	1.00	0.11
33	18	9.39	348.59	349.82	1.23*	1.55	6.06	0.57	350.39	0.800	12.50	348.69	349.92	1.23	1.55	6.07	0.57	350.49	0.802	0.801	0.100	1.00	0.57
34	18	5.01	349.40	351.42	1.50	1.77	2.83	0.12	351.55	0.227	44.00	349.50	351.52	1.50	1.77	2.83	0.12	351.65	0.227	0.227	0.100	1.00	0.12
35	18	3.49	349.60	351.65	1.50	1.77	1.98	0.06	351.71	0.111	244.00	349.87	351.92	1.50	1.77	1.98	0.06	351.98	0.111	0.111	0.270	0.15	0.01
36	18	3.49	349.87	351.93	1.50	1.77	1.98	0.06	351.99	0.111	244.00	350.14	352.20	1.50	1.77	1.98	0.06	352.26	0.111	0.111	0.270	1.00	0.06
37	18	11.07	350.24	352.26	1.50	1.77	6.27	0.61	352.87	1.112	9.00	350.34	352.36	1.50	1.77	6.26	0.61	352.97	1.111	1.111	0.100	1.00	0.61

Project File: 19264 Frankwood SD_4.13.20.stm | Number of lines: 37 | Run Date: 8/13/2020

Notes: * depth assumed; ** Critical depth. ; c = cir e = ellip b = box

NOAA Atlas 14, Volume 6, Version 2
Location name: Reedley, California, USA*
Latitude: 36.6206°, Longitude: -119.4464°
Elevation: 360.01 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.996** (0.840-1.20)	**1.30** (1.09-1.57)	**1.72** (1.44-2.08)	**2.08** (1.72-2.53)	**2.59** (2.08-3.28)	**3.02** (2.36-3.90)	**3.48** (2.65-4.62)	**3.98** (2.94-5.44)	**4.70** (3.32-6.72)	**5.30** (3.62-7.86)
10-min	**0.720** (0.600-0.864)	**0.930** (0.780-1.12)	**1.23** (1.03-1.49)	**1.49** (1.23-1.82)	**1.86** (1.49-2.35)	**2.17** (1.69-2.80)	**2.50** (1.90-3.31)	**2.85** (2.11-3.90)	**3.37** (2.38-4.82)	**3.80** (2.59-5.63)
15-min	**0.580** (0.484-0.696)	**0.752** (0.628-0.908)	**0.992** (0.828-1.20)	**1.20** (0.992-1.46)	**1.50** (1.20-1.90)	**1.74** (1.36-2.26)	**2.01** (1.53-2.67)	**2.30** (1.70-3.14)	**2.72** (1.92-3.88)	**3.07** (2.09-4.54)
30-min	**0.400** (0.336-0.482)	**0.520** (0.436-0.628)	**0.688** (0.574-0.830)	**0.830** (0.688-1.01)	**1.04** (0.830-1.31)	**1.21** (0.944-1.56)	**1.39** (1.06-1.85)	**1.59** (1.18-2.17)	**1.88** (1.33-2.69)	**2.12** (1.45-3.14)
60-min	**0.271** (0.227-0.326)	**0.352** (0.295-0.425)	**0.466** (0.389-0.563)	**0.563** (0.466-0.686)	**0.703** (0.562-0.889)	**0.819** (0.640-1.06)	**0.943** (0.718-1.25)	**1.08** (0.797-1.47)	**1.27** (0.901-1.82)	**1.44** (0.981-2.13)
2-hr	**0.196** (0.164-0.235)	**0.250** (0.210-0.302)	**0.326** (0.272-0.394)	**0.392** (0.325-0.478)	**0.488** (0.390-0.616)	**0.565** (0.442-0.730)	**0.648** (0.494-0.860)	**0.739** (0.546-1.01)	**0.869** (0.614-1.24)	**0.976** (0.666-1.45)
3-hr	**0.160** (0.134-0.192)	**0.204** (0.171-0.246)	**0.265** (0.222-0.321)	**0.318** (0.264-0.388)	**0.395** (0.315-0.499)	**0.457** (0.357-0.591)	**0.524** (0.399-0.695)	**0.596** (0.441-0.815)	**0.699** (0.495-0.999)	**0.784** (0.534-1.16)
6-hr	**0.111** (0.093-0.133)	**0.141** (0.118-0.170)	**0.183** (0.153-0.221)	**0.219** (0.182-0.267)	**0.271** (0.217-0.343)	**0.313** (0.245-0.405)	**0.358** (0.272-0.475)	**0.406** (0.300-0.555)	**0.474** (0.336-0.678)	**0.530** (0.361-0.785)
12-hr	**0.074** (0.062-0.089)	**0.095** (0.080-0.115)	**0.125** (0.104-0.151)	**0.150** (0.124-0.183)	**0.185** (0.148-0.234)	**0.213** (0.167-0.276)	**0.243** (0.185-0.323)	**0.275** (0.203-0.375)	**0.319** (0.226-0.456)	**0.355** (0.242-0.525)
24-hr	**0.049** (0.044-0.056)	**0.064** (0.058-0.073)	**0.085** (0.076-0.097)	**0.102** (0.091-0.118)	**0.127** (0.108-0.151)	**0.146** (0.122-0.178)	**0.166** (0.136-0.208)	**0.187** (0.149-0.241)	**0.217** (0.165-0.292)	**0.241** (0.177-0.336)
2-day	**0.031** (0.027-0.035)	**0.040** (0.036-0.046)	**0.054** (0.048-0.061)	**0.065** (0.057-0.075)	**0.080** (0.069-0.096)	**0.093** (0.078-0.113)	**0.106** (0.086-0.132)	**0.119** (0.095-0.154)	**0.139** (0.105-0.186)	**0.154** (0.113-0.215)
3-day	**0.023** (0.020-0.026)	**0.030** (0.027-0.034)	**0.040** (0.035-0.045)	**0.048** (0.043-0.055)	**0.060** (0.051-0.071)	**0.069** (0.058-0.084)	**0.079** (0.064-0.099)	**0.089** (0.071-0.115)	**0.104** (0.079-0.140)	**0.116** (0.085-0.162)
4-day	**0.019** (0.017-0.021)	**0.024** (0.022-0.028)	**0.032** (0.029-0.037)	**0.039** (0.035-0.045)	**0.049** (0.042-0.058)	**0.057** (0.047-0.069)	**0.065** (0.053-0.081)	**0.073** (0.058-0.094)	**0.086** (0.065-0.115)	**0.095** (0.070-0.133)
7-day	**0.013** (0.011-0.014)	**0.016** (0.015-0.019)	**0.022** (0.019-0.025)	**0.026** (0.023-0.030)	**0.033** (0.028-0.039)	**0.038** (0.032-0.046)	**0.044** (0.036-0.054)	**0.049** (0.039-0.064)	**0.058** (0.044-0.078)	**0.064** (0.047-0.090)
10-day	**0.010** (0.009-0.011)	**0.013** (0.011-0.014)	**0.017** (0.015-0.019)	**0.020** (0.018-0.023)	**0.025** (0.022-0.030)	**0.029** (0.024-0.036)	**0.033** (0.027-0.042)	**0.038** (0.030-0.049)	**0.044** (0.034-0.059)	**0.049** (0.036-0.069)
20-day	**0.006** (0.005-0.007)	**0.008** (0.007-0.009)	**0.011** (0.010-0.012)	**0.013** (0.011-0.015)	**0.016** (0.014-0.019)	**0.019** (0.016-0.023)	**0.021** (0.017-0.027)	**0.024** (0.019-0.031)	**0.028** (0.021-0.037)	**0.031** (0.023-0.043)
30-day	**0.005** (0.004-0.006)	**0.006** (0.006-0.007)	**0.009** (0.008-0.010)	**0.010** (0.009-0.012)	**0.013** (0.011-0.015)	**0.015** (0.012-0.018)	**0.017** (0.014-0.021)	**0.019** (0.015-0.024)	**0.022** (0.017-0.029)	**0.024** (0.018-0.034)
45-day	**0.004** (0.004-0.005)	**0.005** (0.005-0.006)	**0.007** (0.006-0.008)	**0.008** (0.007-0.010)	**0.010** (0.009-0.012)	**0.012** (0.010-0.015)	**0.014** (0.011-0.017)	**0.015** (0.012-0.020)	**0.017** (0.013-0.023)	**0.019** (0.014-0.027)
60-day	**0.004** (0.003-0.004)	**0.005** (0.004-0.005)	**0.006** (0.005-0.007)	**0.007** (0.007-0.008)	**0.009** (0.008-0.011)	**0.010** (0.009-0.013)	**0.012** (0.010-0.015)	**0.013** (0.010-0.017)	**0.015** (0.011-0.020)	**0.016** (0.012-0.023)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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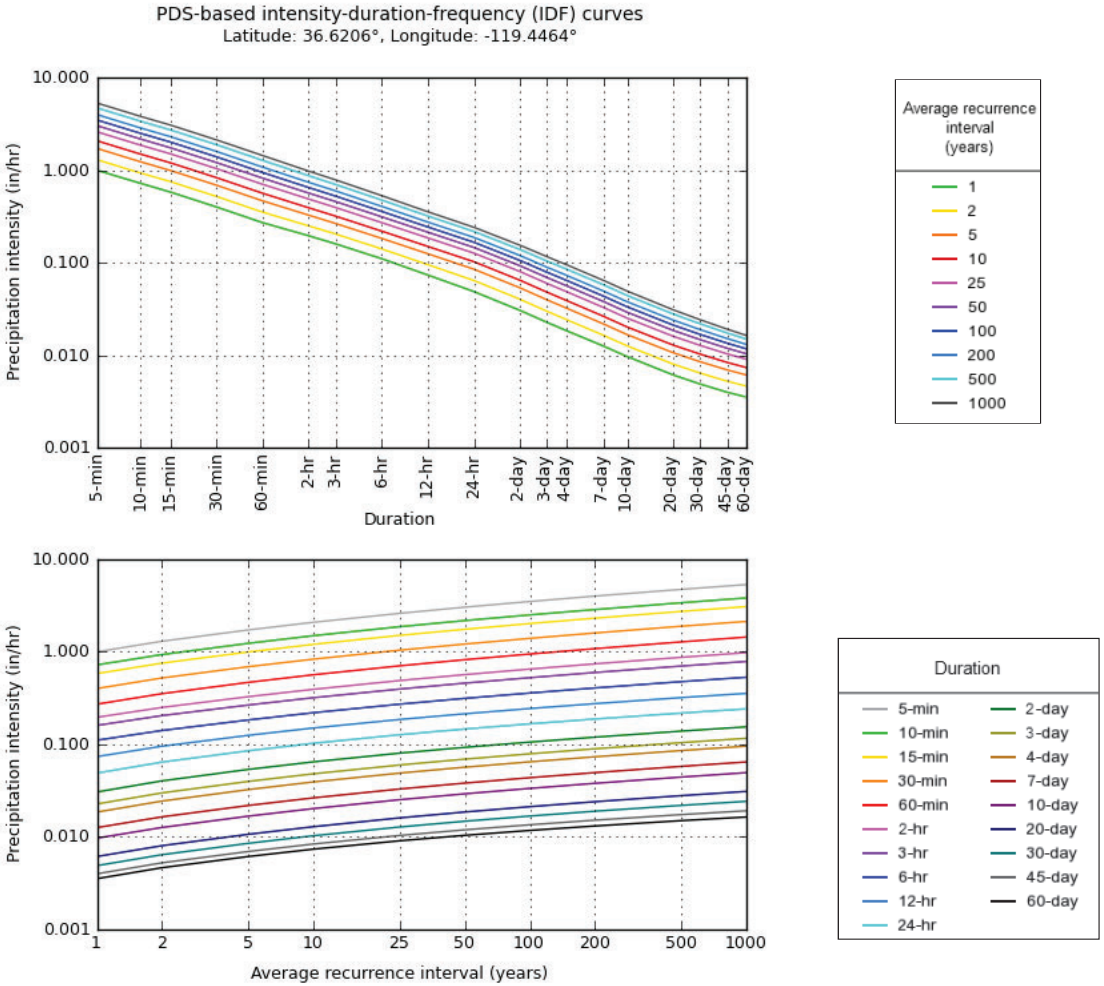
PF graphical



NOAA Atlas 14, Volume 6, Version 2

Created (GMT): Mon Apr 13 19:47:18 2020

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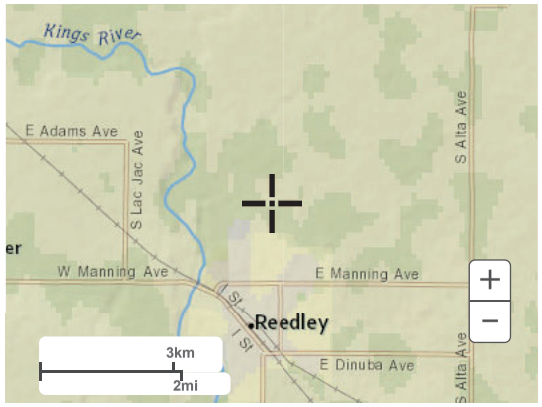
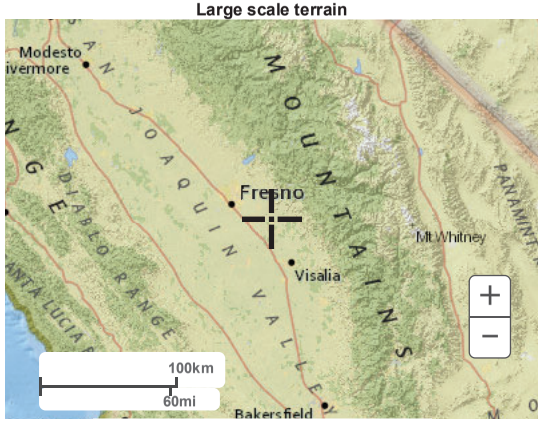
Maps & aerials

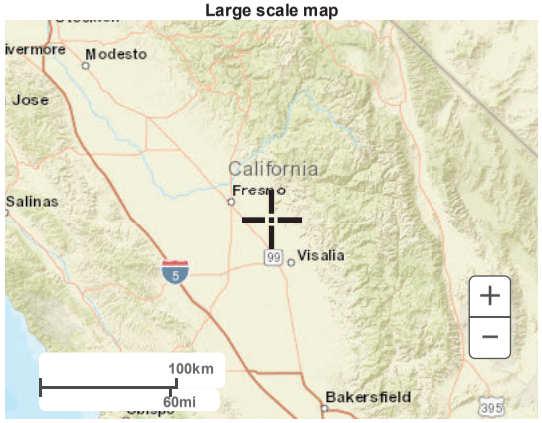
Small scale terrain



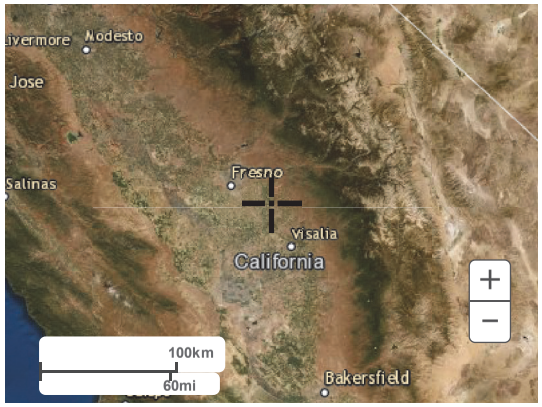
Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Appendix C

Cultural Records Search Results

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

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

To: Nate Antepenko
4 Creeks
324 S. Santa Fe Street, Suite A
Visalia, CA 93292

Record Search 23-051

Date: February 14, 2023

Re: Frankwood Commons Commercial Village

County: Fresno

Map(s): Reedley 7.5'

CULTURAL RESOURCES RECORDS SEARCH

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

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

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

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There has been one cultural resource study conducted within the one-half mile radius: FR-02273.

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

According to the information in our files, there are no recorded resources within the project area or the project radius, and it is unknown if any exist there.

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

COMMENTS AND RECOMMENDATIONS

We understand the purpose of this project proposes a commercial development on 4.19 gross acres in the City of Reedley. Additionally, we understand the project involves constructing a 5,216 square foot gas station/convenience store and an 11,000 square foot medical clinic. We are also aware that the project area is currently vacant land. Because the project area has not been previously studied for cultural resources, it is unknown if any are present. As such, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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

By:

Jeremy E David, Assistant Coordinator **Date**: February 14, 2023

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

Appendix D

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]				
Demolition	Rubber Tired Dozers				0.4	0	0.367	0.00	0				
Demolition	Concrete/Industrial Saws				0.73	0	0.408	0.00	0				
Demolition	Excavators				0.37	0	0.408	0.00	0				
Site Preparation	Rubber Tired Dozers	3	8	247	0.4	120	0.367	612.06	85.07668139				
Site Preparation	Graders				0.41	0	0.367	0.00	0				
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	160	0.408	329.57	45.80995763	942	131		
Grading	Excavators	2	8	158	0.38	128	0.367	396.74	55.14714117				
Grading	Graders	1	8	187	0.41	64	0.367	253.32	35.21095364	2404	334		
Grading	Rubber Tired Dozers	1	8	247	0.4	64	0.367	326.43	45.37423007				
Grading	Scrapers	2	8	367	0.48	128	0.367	1164.06	161.804137				
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	128	0.408	263.65	36.6479661				
Building Construction	Cranes	1	7	231	0.29	1610	0.367	5567.93	773.9416234	29906	4157		
Building Construction	Forklifts	3	8	89	0.2	5520	0.408	5639.11	783.8365835				
Building Construction	Generator Sets	1	8	84	0.74	1840	0.408	6564.18	912.4210118				
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	4830	0.408	9948.84	1382.888096				
Building Construction	Welders	1	8	46	0.45	1840	0.408	2185.95	303.8467655				
Paving	Pavers	2	8	130	0.42	288	0.367	811.79	112.8385458	2021	281	35,505	4,935
Paving	Paving Equipment	2	8	132	0.36	288	0.367	706.52	98.2067344				
Paving	Rollers	2	8	80	0.38	288	0.408	502.48	69.8445495				
Paving	Cement and Mortar Mixers	0		9	0.56	0	0.408	0.00	0				
Paving	Tractors/Loaders/Backhoes	0	8	97	0.37	0	0.408	0.00	0				
Architectural Coating	Air Compressors	1	6	78	0.48	108	0.408	232.07	32.25715378				
Total								35,505	4,935				

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	1/27/2024	2/3/2024	5	5
2	Grading	Grading	2/3/2024	2/14/2024	5	8
3	Building Construction	Building Construction	2/15/2024	1/1/2025	5	230
4	Paving	Paving	1/2/2025	1/27/2025	5	18
5	Architectural Coating	Architectural Coating	1/28/2025	2/20/2025	5	18

Notes 390 0.935897436 39.85714286
1.068493151

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]	VMT/Day	MPG Factor (EMFAC2017)	Gallons of Gas/Day	# of Days	Total Gallons of Gas	MBTU	Total Gallons in Construction
Demolition		10.8	0	26.52	0.0	0	0.0	0	0
Site Preparation	18	10.8	194.4	26.52	7.3	5	36.7	4.25514478	978
Grading	15	10.8	162	26.52	6.1	8	48.9	5.67352638	2453
Building Construction	5	10.8	54	26.52	2.0	230	468	54.3712944	30374
Paving	20	10.8	216	26.52	8.1	18	146.6	17.0205791	2167
Architectural Coating	1	10.8	10.8	26.52	0.4	18	7.3	0.85102896	239
Total	**59**	**N/A**	**637.2**	**N/A**	**24.0**	**279**	**708**	**82.2**	**36,213**

Vendor Trips

	Daily Vendor Trips	Vendor Trip Length	VMT/Day	MPG Factor	Gallons of Diesel/Day	# of Days	Total Gallons of Diesel	MBTU
Building Construction	3	7.3	21.9	7.42	3.0	230	679	94.388

1,387 177

Hauling Trips

5,112

	Daily Hauling Trips	Hauling Trip Length	VMT/Day	MPG Factor	Gallons of Gas/Day	# of Days	Total Gallons of Diesel	MBTU
Demolition	0	20	0	8.43	0.0	0	-	-

4,784

Fleet Characteristics

679 94

	Vehicle Class	Fleet Mix	2024 MPG Factor (EMFAC2017)	Average MPG Factor
Assumed Vehicle Fleet for Workers	LDA	33%	30.19	
	LDT1	33%	24.90	
	LDT2	33%	24.47	26.52
Assumed Vehicle Fleet for Vendor Trips	MHD	50%	8.73	
	HHD	50%	6.11	7.42

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)	2,086,881

Fleet Mix & Fuel Calculations

Vehicle Class	Proportion of Fleet Mix[1]	Annual VMT by Vehicle Class	Proportion of vehicle class using gas or diesel (EMFAC2021)[2]		Annual VMT by Vehicle Class and Fuel Type		Fuel Efficiency (MPG) by Vehicle Class and Fuel Type (EMFAC2021)		Annual Fuel Use from Project (gallons)		MBTU/Year[3]
			Gas	Diesel	Gas	Diesel	Gas	Diesel	Gas	Diesel	
LDA	52.15%	1088220.8	100%	0%	1086477.40	1743.39	30.19	44.96	35991.9	38.8	4183.7
LDT1	5.33%	111247.5	100%	0%	111225.77	21.69	24.90	25.36	4466.4	0.9	518.6
LDT2	17.57%	366573.2	100%	0%	365504.53	1068.63	24.47	35.03	14939.7	30.5	1738.6
MDV	15.20%	317128.7	98%	2%	312357.56	4771.14	19.66	25.32	15886.4	188.5	1870.4
LHD1	2.50%	52174.1	53%	47%	27772.19	24401.92	9.65	15.84	2877.5	1540.9	548.2
LHD2	0.67%	13890.3	32%	68%	4381.57	9508.71	8.42	13.20	520.2	720.3	160.5
MHD	1.44%	30065.7	12%	88%	3718.50	26347.20	4.75	8.73	783.0	3018.4	510.5
HHD	2.27%	47409.8	0%	100%	1.74	47408.02	3.99	6.11	0.4	7763.4	1079.2
OBUS	0.07%	1465.0	55%	45%	800.41	664.58	4.78	6.58	167.5	101.0	33.5
UBUS	0.03%	598.9	68%	32%	407.12	191.82	4.82	9.14	84.5	21.0	12.7
MCY	2.35%	49073.0	100%	0%	49073.01	0.00	41.37	NA	1186.3	0.0	137.7
SBUS	0.15%	3053.1	49%	51%	1509.98	1543.13	10.02	8.34	150.7	185.0	43.2
MH	0.29%	5978.9	67%	33%	3987.80	1991.11	4.41	9.40	903.9	211.9	134.4
Total	**100.00%**	**2086878.9**			**1967217.59**	**119661.33**	**14.73**		**77,958**	**13,820**	**10,971**

9,050 1,921

Fleet Characteristics

22.7

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Kings (SJV)
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

GASOLINE

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT (Annual)	Trips (Annual)	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
Fresno County	2025	HHDT	Aggregated	Aggregated	GAS	0.792491733	24049.46502	5184.969092	6.020914217	6021	3.99
Fresno County	2025	LDA	Aggregated	Aggregated	GAS	316061.7189	4213112033	508660417.6	139568.2776	139568278	30.19
Fresno County	2025	LDT1	Aggregated	Aggregated	GAS	29804.00447	336532944.9	44611739.99	13513.72087	13513721	24.90
Fresno County	2025	LDT2	Aggregated	Aggregated	GAS	148873.0637	2008595395	239628294.9	82099.79149	82099791	24.47
Fresno County	2025	LHDT1	Aggregated	Aggregated	GAS	12157.40146	142891109.2	59228583.67	14805.17726	14805177	9.65
Fresno County	2025	LHDT2	Aggregated	Aggregated	GAS	1993.211327	22098116.97	9710552.397	2623.441466	2623441	8.42
Fresno County	2025	MCY	Aggregated	Aggregated	GAS	15807.73915	29768469.28	10970570.97	719.6003646	719600	41.37
Fresno County	2025	MDV	Aggregated	Aggregated	GAS	128955.2326	1562126582	202094479.3	79449.20992	79449210	19.66
Fresno County	2025	MH	Aggregated	Aggregated	GAS	1410.944044	4119701.208	46156.32539	933.7679946	933768	4.41
Fresno County	2025	MHDT	Aggregated	Aggregated	GAS	910.5276922	16723816.76	5957233.047	3521.481101	3521481	4.75
Fresno County	2025	OBUS	Aggregated	Aggregated	GAS	286.8972081	4477630.477	1877058.264	936.7894704	936789	4.78
Fresno County	2025	SBUS	Aggregated	Aggregated	GAS	313.8974588	6124824.156	410577.8761	611.475117	611475	10.02
Fresno County	2025	UBUS	Aggregated	Aggregated	GAS	90.5416307	1386480.103	118428.453	287.6406322	287641	4.82

DIESEL

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
Fresno County	2025	HHDT	Aggregated	Aggregated	DSL	14894.83605	654723330.3	79090063.18	107215.0253	107215025	6.11
Fresno County	2025	LDA	Aggregated	Aggregated	DSL	664.1610576	6760488.122	968325.439	150.3834289	150383	44.96
Fresno County	2025	LDT1	Aggregated	Aggregated	DSL	16.92722929	65612.48594	16601.49125	2.586746696	2587	25.36
Fresno County	2025	LDT2	Aggregated	Aggregated	DSL	403.4049479	5872578.782	667378.0508	167.6308942	167631	35.03
Fresno County	2025	LHDT1	Aggregated	Aggregated	DSL	10824.69883	125550648.9	44524677.66	7927.933411	7927933	15.84
Fresno County	2025	LHDT2	Aggregated	Aggregated	DSL	4061.658904	47956397.5	16706612.94	3632.702178	3632702	13.20
Fresno County	2025	MDV	Aggregated	Aggregated	DSL	1856.856283	23860863.79	2969212.199	942.4826382	942483	25.32
Fresno County	2025	MH	Aggregated	Aggregated	DSL	712.5202071	2056966.05	23299.41077	218.8833567	218883	9.40
Fresno County	2025	MHDT	Aggregated	Aggregated	DSL	7969.311158	118495639.4	30346493.16	13575.21744	13575217	8.73
Fresno County	2025	OBUS	Aggregated	Aggregated	DSL	155.5979291	3717736.516	630788.0989	565.022822	565023	6.58
Fresno County	2025	SBUS	Aggregated	Aggregated	DSL	852.8364713	6259303.02	4038146.578	750.4281399	750428	8.34
Fresno County	2025	UBUS	Aggregated	Aggregated	DSL	19.41057964	653249.2249	25389.03817	71.45527956	71455	9.14

Notes

1. Used project-specific vehicle fleet mix for residential
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 gallong of diesel = 0.139 MBTU

Appendix E

VMT Analysis

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Mr. David Duda
4Creeks
324 South Santa Fe Street, Suite A
Visalia, California 93292

February 2, 2023

Subject: Vehicle Miles Traveled Analysis
Proposed Frankwood Commons Commercial Village
Northeast of the Intersection of Frankwood and South Avenues
Reedley, California

Dear Mr. Duda:

Introduction

This report presents the results of vehicle miles traveled (VMT) analyses for the subject project.

Project Description

The proposed project is located on approximately 4.19 acres northeast of the intersection of Frankwood and South Avenues in Reedley, California (APN 363-220-041). The project includes a gas station with 12 fueling positions, a 5,216-square-foot convenience market with a drive through window, and an 11,000-square-foot medical office building. Site access is proposed via one driveway connecting to Frankwood Avenue and one driveway connecting to South Avenue.

A vicinity map is presented in the attached Figure 1, Site Vicinity Map, and a site plan is presented in Figure 2, Site Plan, following the text of this report.

Trip Generation

Data provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, are typically used to estimate the number of trips anticipated to be generated by proposed projects. Table 1 presents trip generation estimates for the project.

Information presented in the ITE *Trip Generation Handbook* dated June 2004 (2004 TGH) suggests that captured-trip reductions are applicable to the Project. Captured-trip reductions are applied to account for the interaction between the various individual land uses assumed for the trip generation calculations. A common example of a captured trip occurs in a multi-use development containing both offices and shops. Trips made by office workers to shops within the site are defined as internal to (i.e., "captured within") the multi-use site. A more complete description of captured trips is presented in the 2004 TGH. An example of a captured trip for the proposed Project is a person who fills a car with gasoline and attends a doctor's appointment without exiting the site between the two activities. Capture rates are

based on values taken from Tables 7.1 and 7.2 of the 2004 TGH. The internal capture calculations are attached.

Table 1
Project Trip Generation

Land Use	Units	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Clinic (630)	11 ksf	37.60	414	2.75	81:19	25	6	31	3.69	30:70	12	29	41
Convenience Store / Gas Station GFA (4-5.5k) (945)	12 vfp	257.13	3,086	27.04	50:50	163	162	325	22.76	50:50	137	137	274
Subtotals:			3,500			188	168	356			149	166	315
Internal Capture			-108			-5	-5	-10			-7	-7	-14
TOTALS:			**3,392**			**183**	**163**	**346**			**142**	**159**	**301**

Reference: *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers 2021
Rates are reported in trips per 1,000 square feet of building area or per vehicle fueling position (vfp), as applicable

Vehicle Miles Traveled (VMT)

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. Transportation impacts are identified based on vehicle miles traveled (VMT).

Building upon the guidance in the Technical Advisory, on November 10, 2020 the City of Reedley adopted VMT guidelines based on a document by the Fresno Council of Governments (COG) entitled *Fresno County SB 743 Implementation Regional Guideline*s dated July 2020 (hereinafter referred to as the City Guidelines).

The City Guidelines indicate that projects with the following characteristics may be presumed to cause a less-than-significant transportation impact:

- The project involves local-serving retail space of less than 50,000 square feet
- The project generates fewer than 500 average daily trips

Regarding local-serving retail uses, the Technical Advisory states: "*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.*"

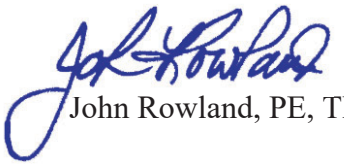
The City Guidelines indicate that mixed-use projects may be evaluated for each component of the project independently, or the lead agency may use the predominant land use type for the analysis. The Technical Advisory states: "*Lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g., residential and retail). Alternatively, a lead agency may consider only the project's dominant use. In the analysis of each use, a project should take credit for*

internal capture. Combining different land uses and applying one threshold to those land uses may result in an inaccurate impact assessment."

The dominant local-serving retail use (gas station/convenience store) of the Project will add retail opportunities into the urban fabric, improve retail destination proximity, shorten trips, and reduce VMT. In addition, the retail portion of the Project is less than 50,000 square feet in size. Therefore, it is suggested that the lead agency may presume that the gas station/convenience store portion of the Project will cause a less-than-significant transportation impact. The medical clinic portion of the project will generate fewer than 500 trips per day and, by adding medical opportunities into the urban fabric, will improve medical destination proximity, shorten trips, and reduce VMT. Therefore, it is suggested that the lead agency may presume that the medical clinic portion of the Project will cause a less-than-significant transportation impact.

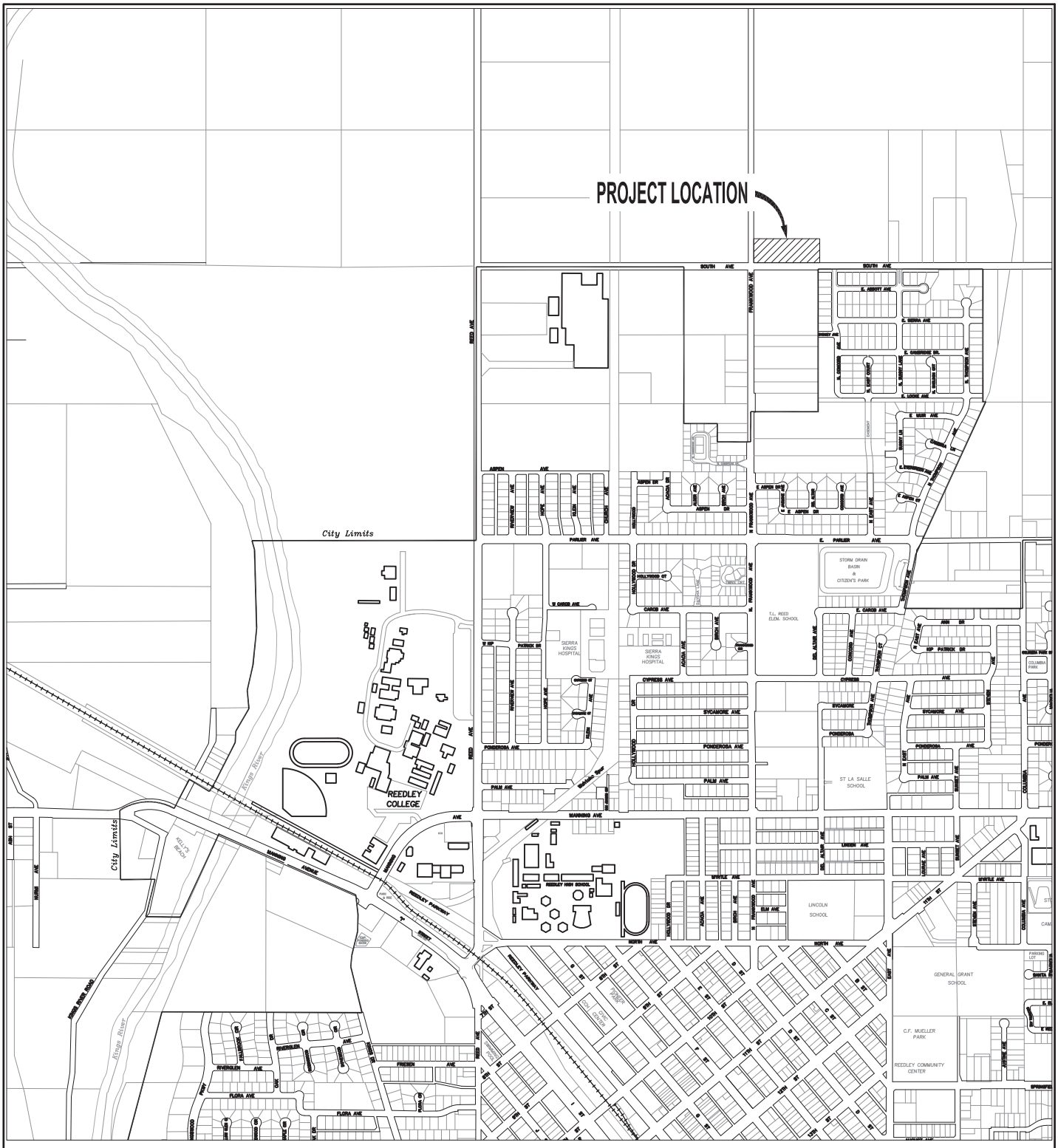
Thank you for the opportunity to perform this VMT analysis. Please feel free to contact our office if you have any questions.

PETERS ENGINEERING GROUP



John Rowland, PE, TE

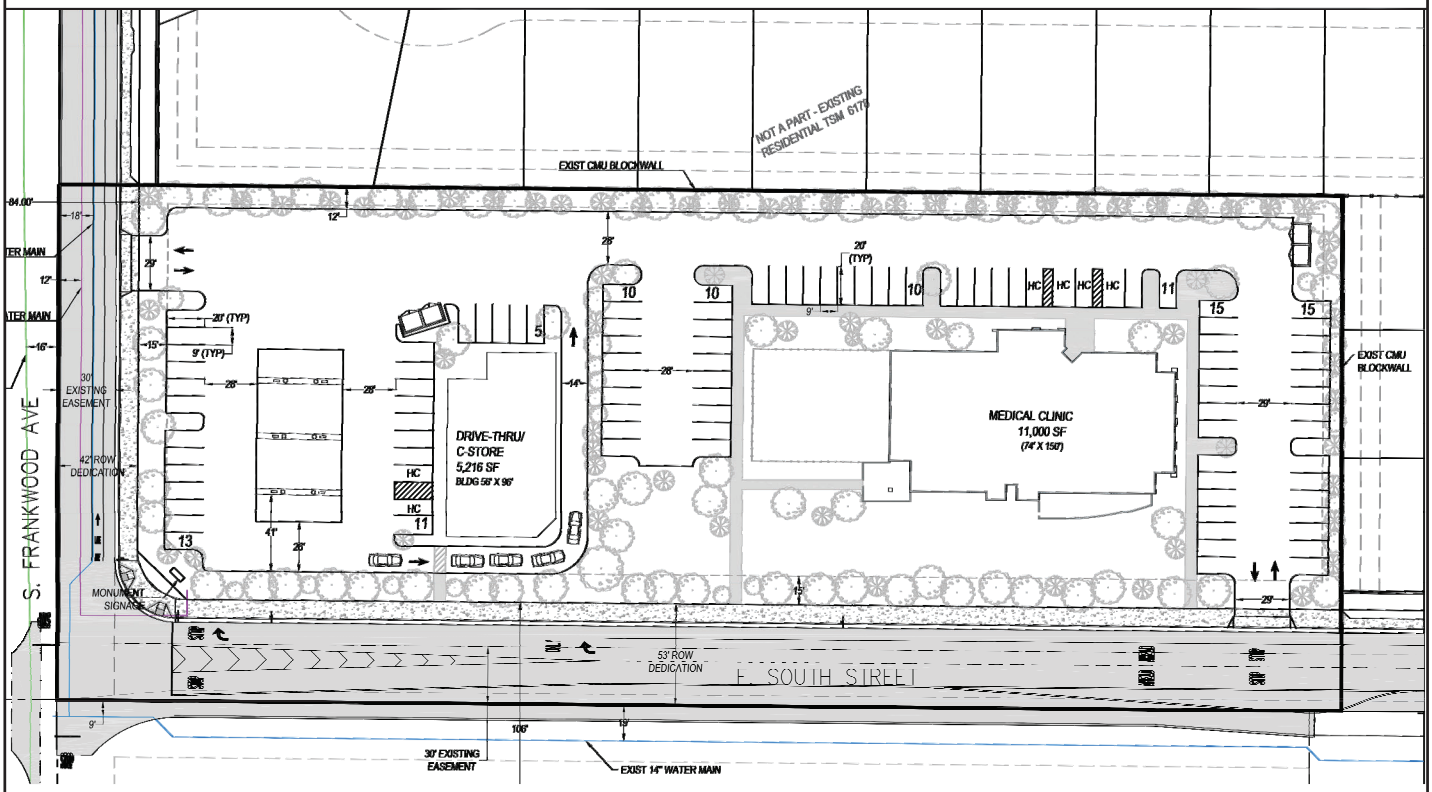
Attachment: Figures
Internal Capture Calculations



Proposed Frankwood Commons Commercial Village
Reedley, California

VICINITY MAP

Not to Scale

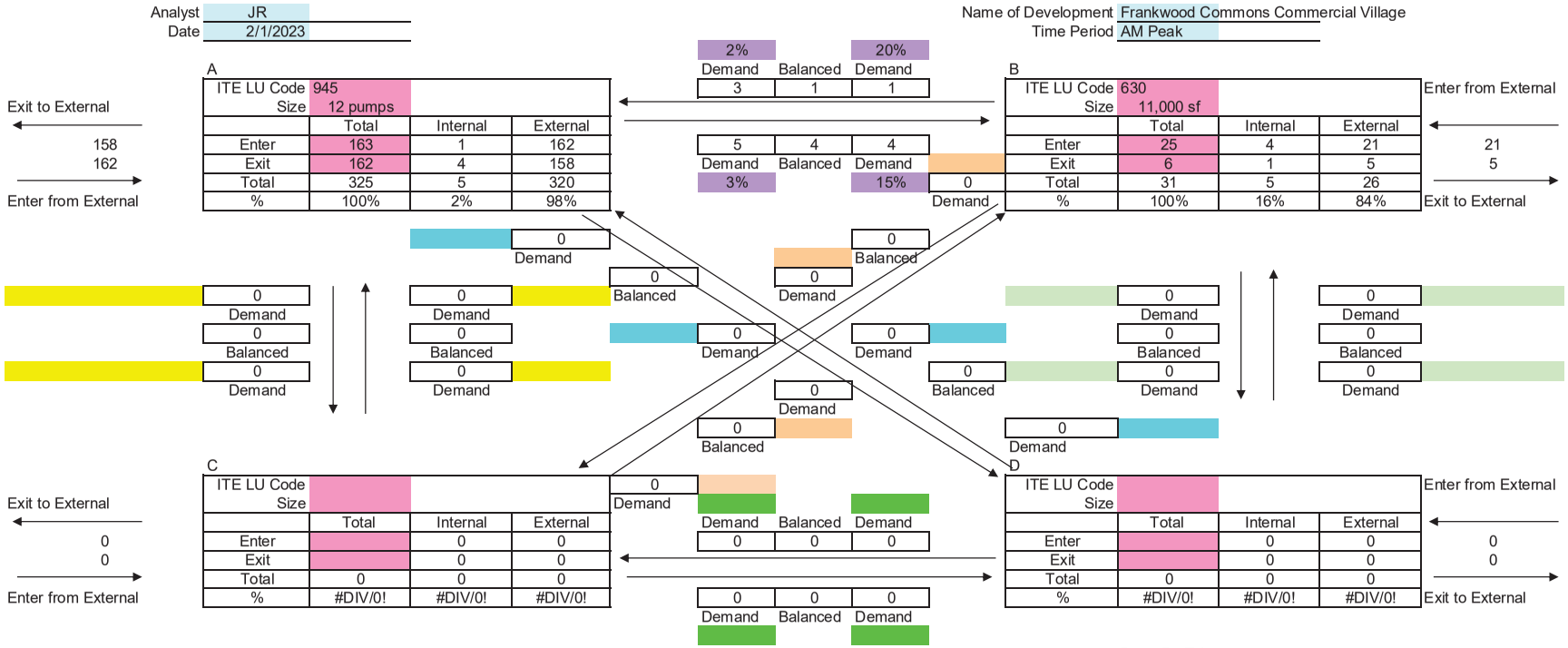


Proposed Frankwood Commons Commercial Village
Reedley, California

SITE PLAN

Not to Scale

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	162	21	0	0	183
Exit	158	5	0	0	163
Total	320	26	0	0	346
Single-Use Trip Gen. Est.	325	31	0	0	356

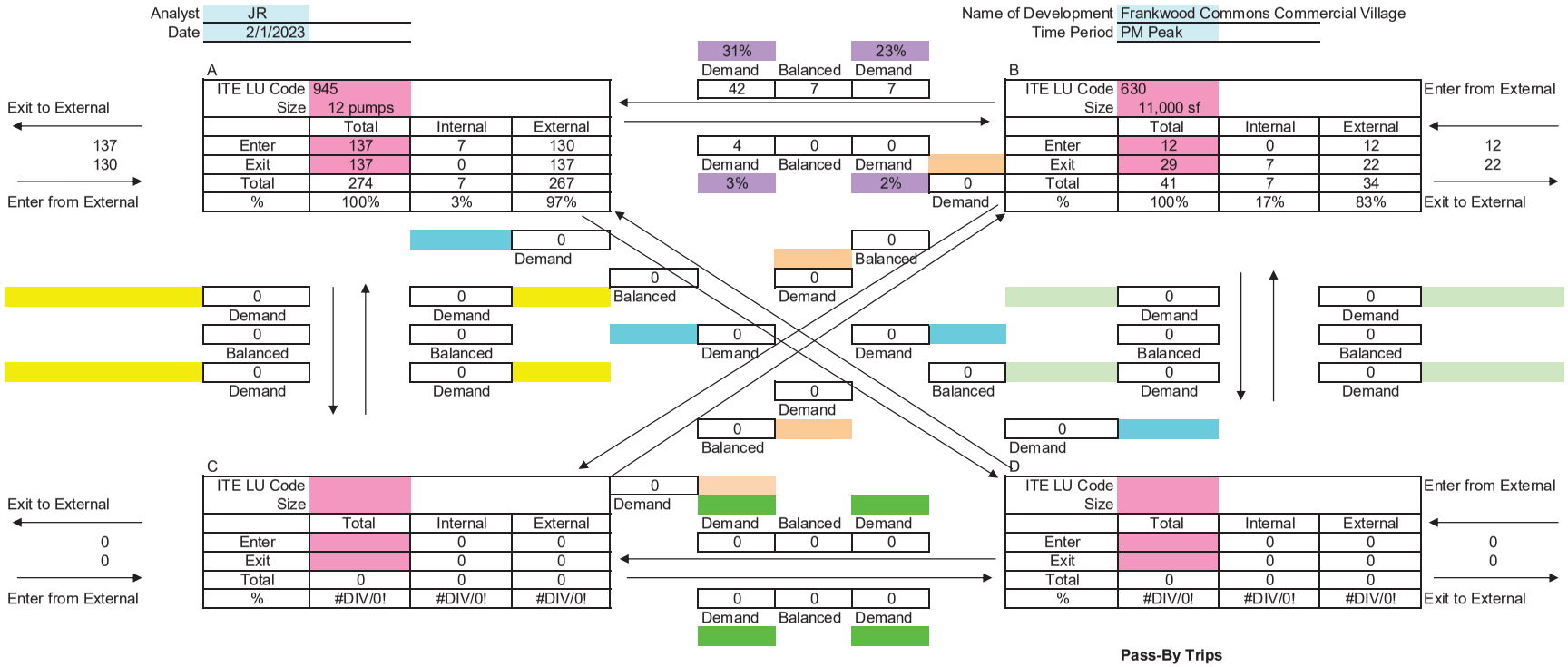
INTERNAL CAPTURE 2.8%

ITE Totals	Captured
188	5
168	5

Pass-By Trips

Pass-by %:	0%	50%	50%	
	Land Use A	Land Use B	Land Use C	Total
	0	10	0	10
	0	2	0	2

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	130	12	0	0	142
Exit	137	22	0	0	159
Total	267	34	0	0	301
Single-Use Trip Gen. Est.	274	41	0	0	315

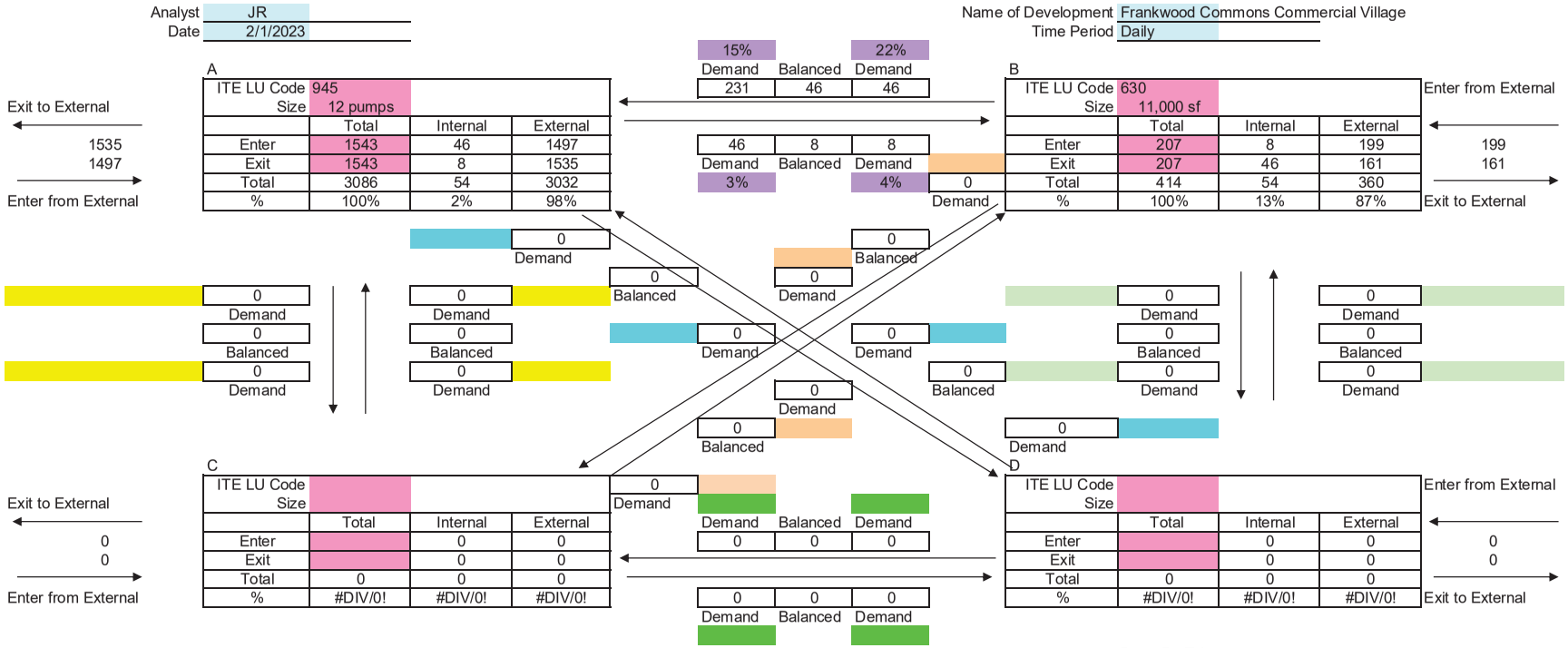
INTERNAL CAPTURE 4.4%

	ITE Totals	Captured
Enter	149	7
Exit	166	7

Pass-By Trips

Pass-by %:	20%	50%	50%	
	Land Use A	Land Use B	Land Use C	Total
Enter	26	5	0	31
Exit	27	11	0	38

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	1497	199	0	0	1696
Exit	1535	161	0	0	1696
Total	3032	360	0	0	3392
Single-Use Trip Gen. Est.	3086	414	0	0	3500

INTERNAL CAPTURE 3.1%

ITE Totals	Captured
1750	54
1750	54

Pass-By Trips

Pass-by %:

Land Use A	Land Use B	Land Use C	Total
0	0	0	0
0	0	0	0

TRAFFIC STUDY

Proposed Frankwood Commons Commercial Village

Northeast of the Intersection of Frankwood and South Avenues

Reedley, California

Prepared For:

4Creeks
324 South Santa Fe Street, Suite A
Visalia, California 93292

Date:

May 2, 2023

Job No.:

23-007.01

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Mr. David Duda
4Creeks
324 South Santa Fe Street, Suite A
Visalia, California 93292

May 2, 2023

Subject: Traffic Study
Proposed Frankwood Commons Commercial Village
Northeast of the Intersection of Frankwood and South Avenues
Reedley, California

Dear Mr. Duda:

1.0 INTRODUCTION

This report presents the results of a traffic study for the proposed Frankwood Commons Commercial Village (hereinafter referred to as the "Project") in Reedley, California. This analysis focuses on the anticipated effect of vehicle traffic resulting from the Project. An analysis of vehicle miles traveled (VMT) for purposes of a CEQA transportation impact analysis was previously presented in a report dated February 2, 2023 and is not included herein.

2.0 PROJECT DESCRIPTION

The proposed project is located on approximately 4.19 acres northeast of the intersection of Frankwood and South Avenues in Reedley, California (APN 363-220-041). The project includes a gas station with 12 fueling positions, a 5,216-square-foot convenience market with a drive through window, and an 11,000-square-foot medical office building. Site access is proposed via one driveway connecting to Frankwood Avenue and one driveway connecting to South Avenue. A vicinity map is presented in the attached Figure 1, Vicinity Map, and a site plan is presented in Figure 2, Site Plan.

3.0 ANALYSIS SCENARIOS AND STUDY AREA

The required study scenarios and locations were determined in coordination with City of Reedley staff based on the anticipated Project traffic distribution, the size of the Project, and the existing conditions in the vicinity of Project site. This report includes intersection operational analyses for the following time periods:

- Weekday a.m. peak hour between 7:00 and 9:00 a.m.
- Weekday p.m. peak hour between 4:00 and 6:00 p.m.

The intersection operational analyses were performed for the following scenarios:

A. Existing Conditions
B. Existing-Plus-Project Conditions
C. Near-Term With-Project Conditions
D. Cumulative (Year 2044) With-Project Conditions.

This report includes operational analysis and traffic signal warrants analysis of the intersection of Frankwood and South Avenues.

This report includes operational analysis of the following road segments:

1. Frankwood Avenue north of South Avenue
2. Frankwood Avenue south of South Avenue
3. South Avenue west of Frankwood Avenue
4. South Avenue east of Frankwood Avenue

4.0 LEVEL OF SERVICE

The State of California does not recognize traffic congestion and delay as an environmental impact per the California Environmental Quality Act (CEQA). However, the City of Reedley General Plan adopted February 18, 2014 sets a goal of maintaining a minimum level of service (LOS) of "C" or better (Goal CIR 3.2B).

The Transportation Research Board *Highway Capacity Manual, 6th Edition,* (HCM) defines LOS as, "A quantitative stratification of a performance measure or measures that represent quality of service, measured on an A-F scale, with LOS A representing the best operating conditions from the traveler's perspective and LOS F the worst." Automobile mode LOS characteristics for unsignalized intersections are presented in Table 1.

Table 1
Level of Service Characteristics for Unsignalized Intersections

Level of Service	Average Vehicle Delay (seconds)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Reference: *Highway Capacity Manual, 6th Edition,* Transportation Research Board, 2016

A traffic issue may be identified if the addition of the traffic generated by the Project results in any one of the following:

- Triggers an intersection operating at acceptable LOS (A, B, or C) to operate at unacceptable levels of service (D, E, or F);
- Increases the average delay for a study intersection that is already operating at unacceptable LOS (D, E, or F) by 5.0 seconds or more.

5.0 EXISTING TRAFFIC VOLUMES

Existing peak-hour traffic volumes at the study intersections were determined by performing manual turning-movement counts between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m. on a weekday while school was in session. The traffic count data sheets are presented in Appendix A. The existing peak-hour turning movement volumes are presented in Figure 3, Existing Peak-Hour Traffic Volumes.

6.0 PROJECT TRIP GENERATION

6.1 Trip Generation

Data provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition,* are typically used to estimate the number of trips anticipated to be generated by proposed projects. Table 2 presents trip generation estimates for the project.

Information presented in the ITE *Trip Generation Handbook* dated June 2004 (2004 TGH) suggests that captured-trip reductions are applicable to the Project. Captured-trip reductions are applied to account for the interaction between the various individual land uses assumed for the trip generation calculations. A common example of a captured trip occurs in a multi-use development containing both offices and shops. Trips made by office workers to shops within the site are defined as internal to (i.e., "captured within") the multi-use site. A more complete description of captured trips is presented in the 2004 TGH. An example of a captured trip for the proposed Project is a person who fills a car with gasoline and attends a doctor's appointment without exiting the site between the two activities. Capture rates are based on values taken from Tables 7.1 and 7.2 of the 2004 TGH. The internal capture calculations are presented in Appendix B.

Table 2
Project Trip Generation

Land Use	Units	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Clinic (630)	11 ksf	37.60	414	2.75	81:19	25	6	31	3.69	30:70	12	29	41
Convenience Store / Gas Station GFA (4-5.5k) (945)	12 vfp	257.13	3,086	27.04	50:50	163	162	325	22.76	50:50	137	137	274
Subtotals:			3,500			188	168	356			149	166	315
Internal Capture			-108			-5	-5	-10			-7	-7	-14
TOTALS:			**3,392**			**183**	**163**	**346**			**142**	**159**	**301**

Reference: *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers 2021
Rates are reported in trips per 1,000 square feet of building area or per vehicle fueling position (vfp), as applicable

6.2 Pass-By Trips

The ITE *Trip Generation Handbook, 3rd Edition* dated September 2017 (2017 TGH) presents information suggesting that pass-by reductions are applicable to the Project. The 2017 TGH states: "There are instances, however, when the total number of trips generated by a site is different from the amount of new traffic added to the street system by the generator. For

example, retail-oriented developments such as shopping centers…are often located adjacent to busy streets in order to attract the motorists already on the street. These sites attract a portion of their trips from traffic passing the site… These retail trips may not add new traffic to the adjacent street system." The 2017 TGH also states: "Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. Pass-by trips are not diverted from another roadway."

Data provided in Appendix E of the 2017 TGH and the proposed orientation of the Project suggest that pass-by trips will occur at the Project site. Data available from ITE (attached) indicate the following average pass-by trip percentages for uses within the proposed Project:

- Convenience Market/Gas Station (Land Use 945): 76 percent of the weekday a.m. peak hour trips and 75 percent of the weekday p.m. peak hour trips.

Since only existing trips on the roadways adjacent to the Project site can generate pass-by trips for the Project, the pass-by percentage assumed in the analyses must yield a feasible volume of pass-by trips that does not exceed the number of existing trips on the roadways. In general, the number of pass-by trips would be a relatively small percentage of the total existing volume on the roadway. Based on data available during the scoping phase of the study, it was determined that the assumed Project pass-by trip volume would be limited to 54 trips entering the site during the a.m. peak hour and 48 trips entering the site during the p.m. peak hour. These values equate to approximately 33 percent of the Project convenience store/gas station a.m. peak hour trips and 35 percent of the Project convenience store/gas station p.m. peak hour trips occurring as pass-by trips, rather than 75 to 76 percent that could occur on higher-volume streets per the 2017 TGH. It is assumed that all trips accessing the medical clinic will be primary trips.

Table 3 presents the volume of pass-by trips and new primary Project trips estimated to be generated by the Project.

Table 3
Pass-By Trips and Primary Project Trips

Time Period	Trips Entering Site	Trips Exiting Site
A.M. Peak Hour Primary Trips	129	109
A.M. Peak Hour Pass-By Trips	54	54
P.M. Peak Hour Primary Trips	94	111
P.M. Peak Hour Pass-By Trips	48	48

6.3 Project Trip Distribution and Assignment

The regional distribution of Project trips was estimated using engineering judgment considering available traffic counts, existing roadways, and complementary land uses. The percentage distribution of Project trips is presented in the attached Figure 4, Project Trip Distribution Percentages. The peak-hour primary Project traffic volumes are presented in Figure 5, Peak-Hour Primary Project Trips.

7.0 LANE CONFIGURATIONS AND INTERSECTION CONTROL

The existing lane configurations and intersection control at the study intersection are presented in Figure 6, Existing Lane Configurations and Intersection Control. For purposes of these analyses, it is assumed that these lane configurations will remain the same through the year 2044.

8.0 EXISTING-PLUS-PROJECT TRAFFIC VOLUMES

The existing-plus-Project peak-hour turning movement volumes are presented in Figure 7, Existing-Plus-Project Peak-Hour Traffic Volumes.

9.0 NEAR-TERM WITH-PROJECT TRAFFIC VOLUMES

Projects that are pending but are not yet complete are included in the analyses to assess near-term cumulative impacts. The following projects are included as near-term projects:

- Frankwood Commons (approximately 73 residences yet to be occupied)
- Residential Development northeast of the intersection of Church and Aspen Avenues (approximately 23 residences yet to be occupied)
- Reedley College Performing Arts Center
- Kings River Development, Southwest of the Intersection of Manning Avenue and I Street.

Near-term with-Project traffic volumes are presented in Figure 8.

10.0 CUMULATIVE YEAR 2044 TRAFFIC VOLUMES

Cumulative traffic volumes for the year 2044 were estimated based on output from the Fresno County travel model. The base year and horizon year model output utilized in the analyses are presented in Appendix C. Year 2044 traffic volumes were extrapolated from the horizon year. Future turning movements were estimated based on the methods presented in Chapter 8 of the Transportation Research Board National Cooperative Highway Research Program Report 255 entitled *"Highway Traffic Data for Urbanized Area Project Planning and Design."* The estimated cumulative year 2044 traffic volumes are presented in Figure 9, Cumulative (Year 2044) With-Project Peak-Hour Traffic Volumes.

11.0 ANALYSES

11.1 Intersection Operational Analyses

The peak hour levels of service at the study intersections were determined using the computer program Synchro 11, which incorporates HCM procedures for calculating levels of service. The intersection analysis sheets are included in Appendix D. Table 4 present the results of the intersection analyses.

Table 4
LOS Summary – Intersection of Frankwood and South Avenues

Scenario	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Existing	All-way stop	9.8	A	8.8	A
Existing Plus Project	All-way stop	11.3	B	9.5	A
Near-Term With Project	All-way stop	12.3	B	10.1	B
Cumulative 2044 With Project	All-way stop	18.6	C	12.7	B

The results of the intersection operational analyses include an estimate of the 95th-percentile queue lengths. The results of queue analyses are presented in Table 5.

Table 5
Queuing Summary - Intersection of Frankwood and South Avenues

Approach Lane	95th-Percentile Queue Length (feet)							
	Existing		Existing Plus Project		Near-Term With Project		Year 2044 With Project	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Eastbound LTR	10	15	20	20	25	25	50	55
Westbound LT	28	13	33	15	43	20	73	28
Westbound R	5	0	5	3	5	3	10	3
Northbound LTR	23	13	35	18	43	25	118	48
Southbound LTR	28	20	48	30	58	35	105	53

LTR: Shared left-turn/through/right-turn lane LT: Shared left-turn/through lane
R: Right-turn lane

11.2 Traffic Signal Warrants

The California State Transportation Agency and California Department of Transportation *California Manual on Uniform Traffic Control Devices, 2014 Edition (Revision 6 dated March 30, 2021)* (CMUTCD) presents various criteria (warrants) for determining the need for traffic signals. The CMUTCD states that an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location.

The investigation of the need for a traffic control signal shall include an analysis of the applicable factors contained in the following traffic signal warrants:

Warrant 1, Eight-Hour Vehicular Volume.
Warrant 2, Four-Hour Vehicular Volume.
Warrant 3, Peak Hour.
Warrant 4, Pedestrian Volume.
Warrant 5, School Crossing.
Warrant 6, Coordinated Signal System.
Warrant 7, Crash Experience.
Warrant 8, Roadway Network.
Warrant 9, Intersection Near a Grade Crossing

If one or more of the signal warrants is met, signalization of the intersection may be appropriate. However, a signal should not be installed if none or few of the warrants are met since the installation of signals may increase delays on the previously uncontrolled major street and may contribute to an increase in accidents.

The installation of a traffic signal can serve as a feasible improvement at an unsignalized intersection if traffic signal warrants are satisfied. If warrants are not satisfied, traffic signals may not be considered as an acceptable improvement.

Crash records were obtained from the Statewide Integrated Traffic Records System (SWITRS) for the years 2018 through 2022. Table 6 summarizes general crash information at the study intersection. The SWITRS records are included in Appendix E.

Table 6
Crash Records Summary – Intersection of Frankwood and South Avenues

Date of Collision	Description	Correctable With Traffic Signals?
September 29, 2018	Improper turn, hit object, not within intersection	No
July 21, 2019	Run stop sign, broadside	No
June 10, 2022	Rear end, driving under the influence	No
July 2, 2022	Rear end, driving under the influence	No

Table 7 summarizes the traffic signal warrants for the existing conditions at the intersection of Frankwood and South Avenues. The traffic signal warrant analysis worksheets are presented in Appendix E.

Table 7
Traffic Signal Warrants Summary – Intersection of Frankwood and South Avenues

Warrant Number	Warrant Description	Satisfied?
1	Eight Hour Vehicular Volume	No
2	Four Hour Vehicular Volume	No
3	Peak Hour	No
4	Pedestrian Volume	No
5	School Crossing	No
6	Coordinated Signal System	No
7	Crash Experience Warrant	No
8	Roadway Network	No
9	Intersection Near a Grade Crossing	No

11.3 Road Segment Operational Analyses

Road segment levels of service were determined based on procedures outlined in the HCM utilizing tables presented in the 2023 Florida Department of Transportation (FDOT) Multimodal Quality/Level of Service Handbook (Florida tables). It should be noted that the Florida tables present generalized correlations between traffic volumes and LOS based on the nationally-utilized and accepted HCM; the Florida tables are frequently utilized throughout

California for road segment analyses. The Florida tables present LOS criteria based on the type of roadway being analyzed and the regional setting, and the appropriate Florida table is dependent upon the setting. The Florida peak hour directional table for a C3R (Suburban Residential) regional setting was used in the analyses, a factor of 0.8 applied for undivided two-lane roadways with no left-turn lanes. The LOS thresholds are presented in Table 8. The Florida tables are presented in Appendix F.

Table 8
Single-Lane Road Segment LOS Thresholds for Peak Hour Directional Volumes

LOS	B	C	D	E
Volume	*	608	856	**

* Cannot be achieved using table input value defaults
** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.

Tables 9 through 16 present the results of the road segment analyses.

Table 9
Frankwood Avenue Road Segment Analyses - Existing Conditions

Segment	**A.M. Peak Hour**				**P.M. Peak Hour**			
	Northbound		Southbound		Northbound		Southbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
North of South Ave	149	C	156	C	104	C	150	C
South of South Ave	139	C	168	C	114	C	163	C

Table 10
South Avenue Road Segment Analyses - Existing Conditions

Segment	**A.M. Peak Hour**				**P.M. Peak Hour**			
	Eastbound		Westbound		Eastbound		Westbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
West of Frankwood	71	C	113	C	113	C	75	C
East of Frankwood	111	C	175	C	132	C	97	C

Table 11
Frankwood Avenue Road Segment Analyses – Existing-Plus-Project Conditions

Segment	**A.M. Peak Hour**				**P.M. Peak Hour**			
	Northbound		Southbound		Northbound		Southbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
North of South Ave	223	C	222	C	158	C	208	C
South of South Ave	177	C	201	C	142	C	196	C

Table 12
South Avenue Road Segment Analyses - Existing-Plus-Project Conditions

Segment	A.M. Peak Hour				P.M. Peak Hour			
	Eastbound		Westbound		Eastbound		Westbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
West of Frankwood	110	C	146	C	141	C	108	C
East of Frankwood	123	C	184	C	142	C	113	C

Table 13
Frankwood Avenue Road Segment Analyses – Near-Term-With-Project Conditions

Segment	A.M. Peak Hour				P.M. Peak Hour			
	Northbound		Southbound		Northbound		Southbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
North of South Ave	232	C	235	C	174	C	220	C
South of South Ave	196	C	224	C	168	C	216	C

Table 14
South Avenue Road Segment Analyses - Near-Term-With -Project Conditions

Segment	A.M. Peak Hour				P.M. Peak Hour			
	Eastbound		Westbound		Eastbound		Westbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
West of Frankwood	124	C	170	C	168	C	126	C
East of Frankwood	138	C	209	C	170	C	130	C

Table 15
Frankwood Avenue Road Segment Analyses – Year 2044 With-Project Conditions

Segment	A.M. Peak Hour				P.M. Peak Hour			
	Northbound		Southbound		Northbound		Southbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
North of South Ave	267	C	278	C	198	C	261	C
South of South Ave	293	C	291	C	239	C	322	C

Table 16
South Avenue Road Segment Analyses - Year 2044 With -Project Conditions

Segment	A.M. Peak Hour				P.M. Peak Hour			
	Eastbound		Westbound		Eastbound		Westbound	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
West of Frankwood	169	C	265	C	263	C	191	C
East of Frankwood	167	C	250	C	204	C	152	C

12.0 DISCUSSION OF ANALYSES

The intersection analyses indicate that the intersection of Frankwood and South Avenues is currently operating at acceptable levels of service during the peak hours and is expected to continue to operate at acceptable levels of service through the year 2044 with the Project.

The results of the warrants analyses indicate that the intersection of Frankwood and South Avenues should not be signalization based on the existing conditions.

The road segment analyses indicate that the study road segments are currently operating at acceptable levels of service during the peak hours and are expected to continue to operate at acceptable levels of service through the year 2044 with the Project.

13.0 CONCLUSIONS

Generally-accepted traffic engineering principles and methods were employed to estimate the amount of traffic expected to be generated by the Project, to analyze the existing traffic conditions, and to analyze the traffic conditions projected to occur in the future.

The intersection of Frankwood and South Avenues and the study road segments are currently operating at acceptable levels of service during the peak hours and are expected to continue to operate at acceptable levels of service through the year 2044 with the Project. Warrants for signalization of the intersection of Frankwood and South Avenues are not met.

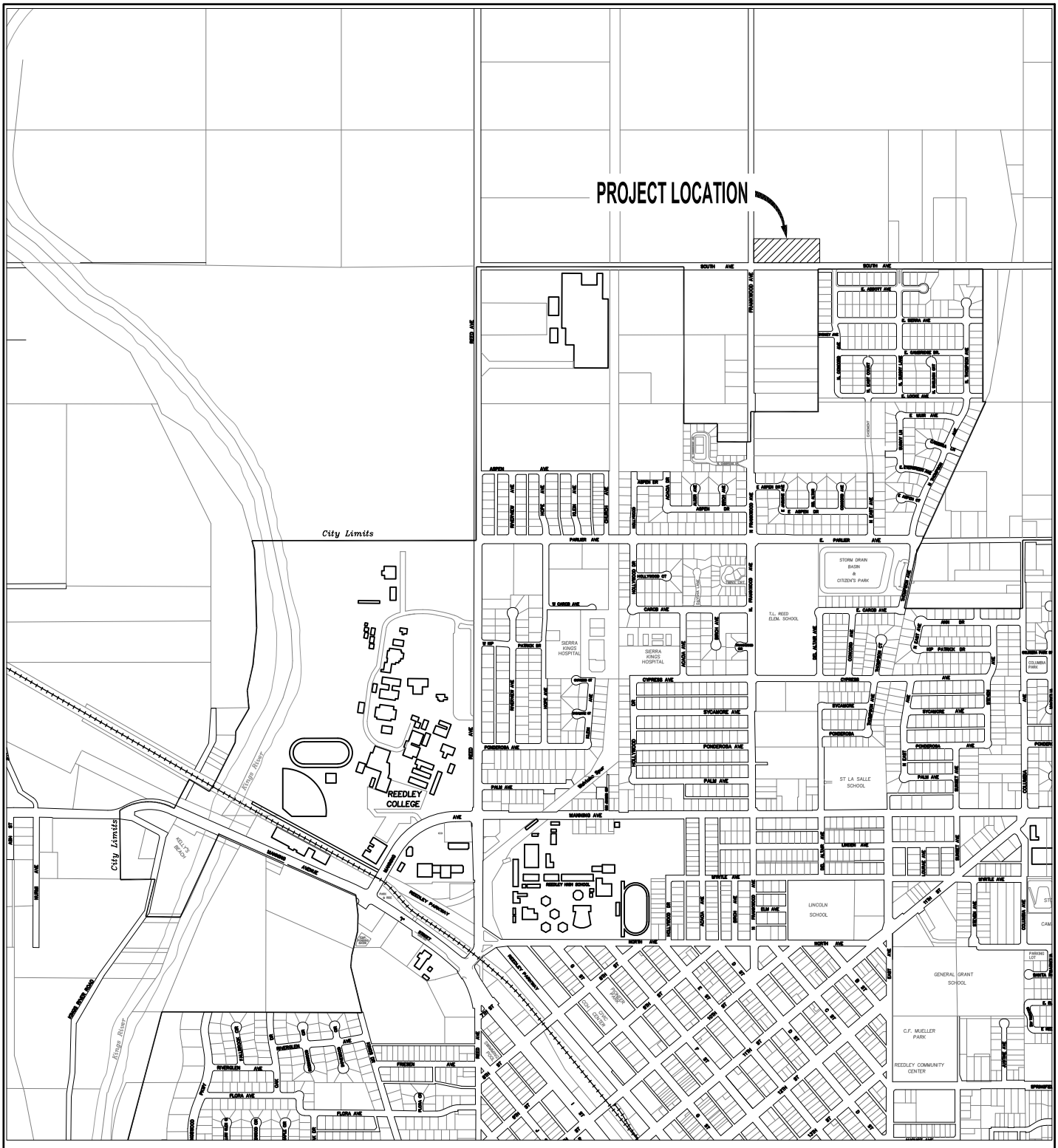
Thank you for the opportunity to perform this traffic study. Please feel free to contact our office if you have any questions.

PETERS ENGINEERING GROUP

John Rowland, PE, TE

Attachments: Figures
Appendix A – Traffic Count Data Sheets
Appendix B – Internal Capture Analyses
Appendix C – Fresno County Travel Model
Appendix D – Intersection Analysis Sheets
Appendix E – Traffic Signal Warrant Analyses
Appendix F – Florida Tables

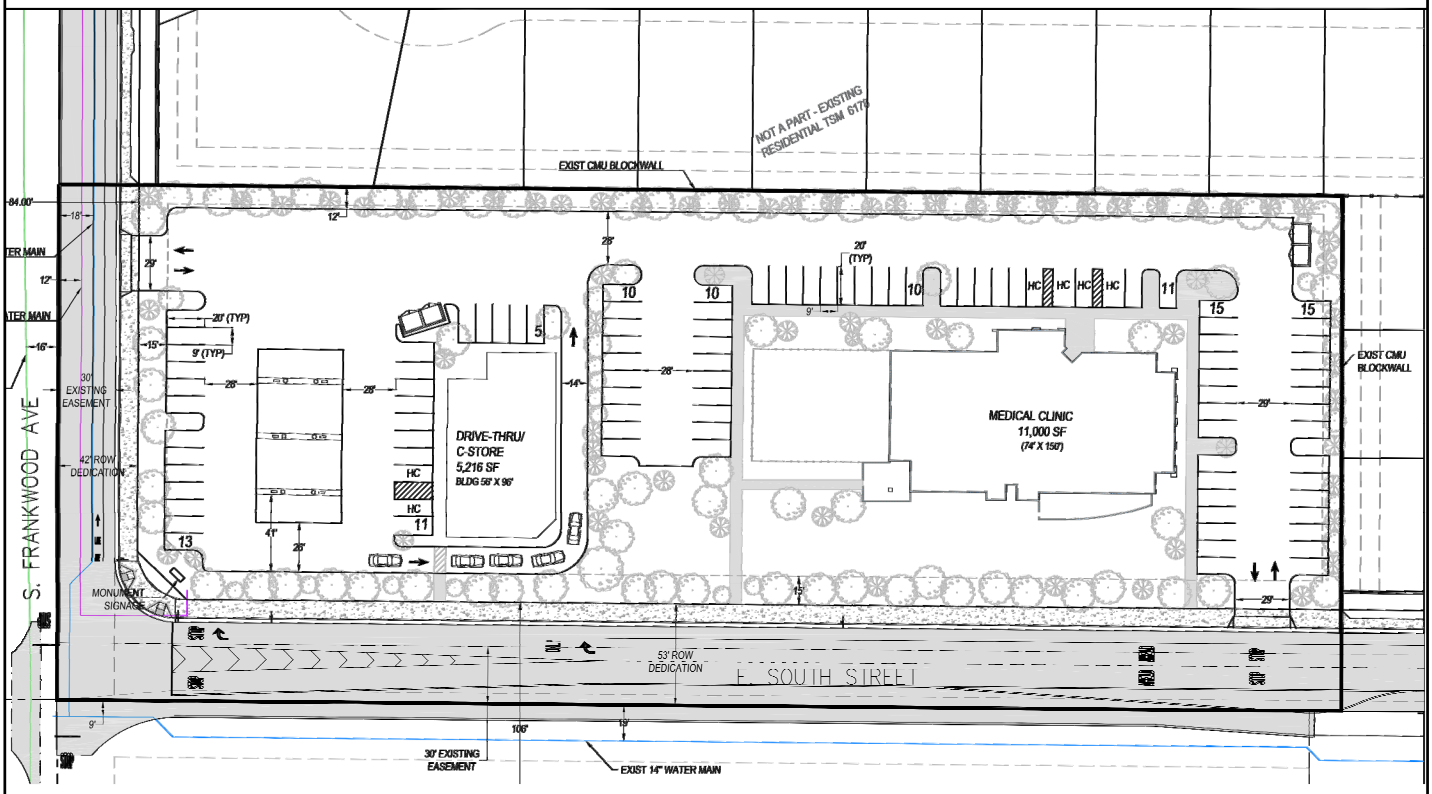
FIGURES



Proposed Frankwood Commons Commercial Village
Reedley, California

VICINITY MAP

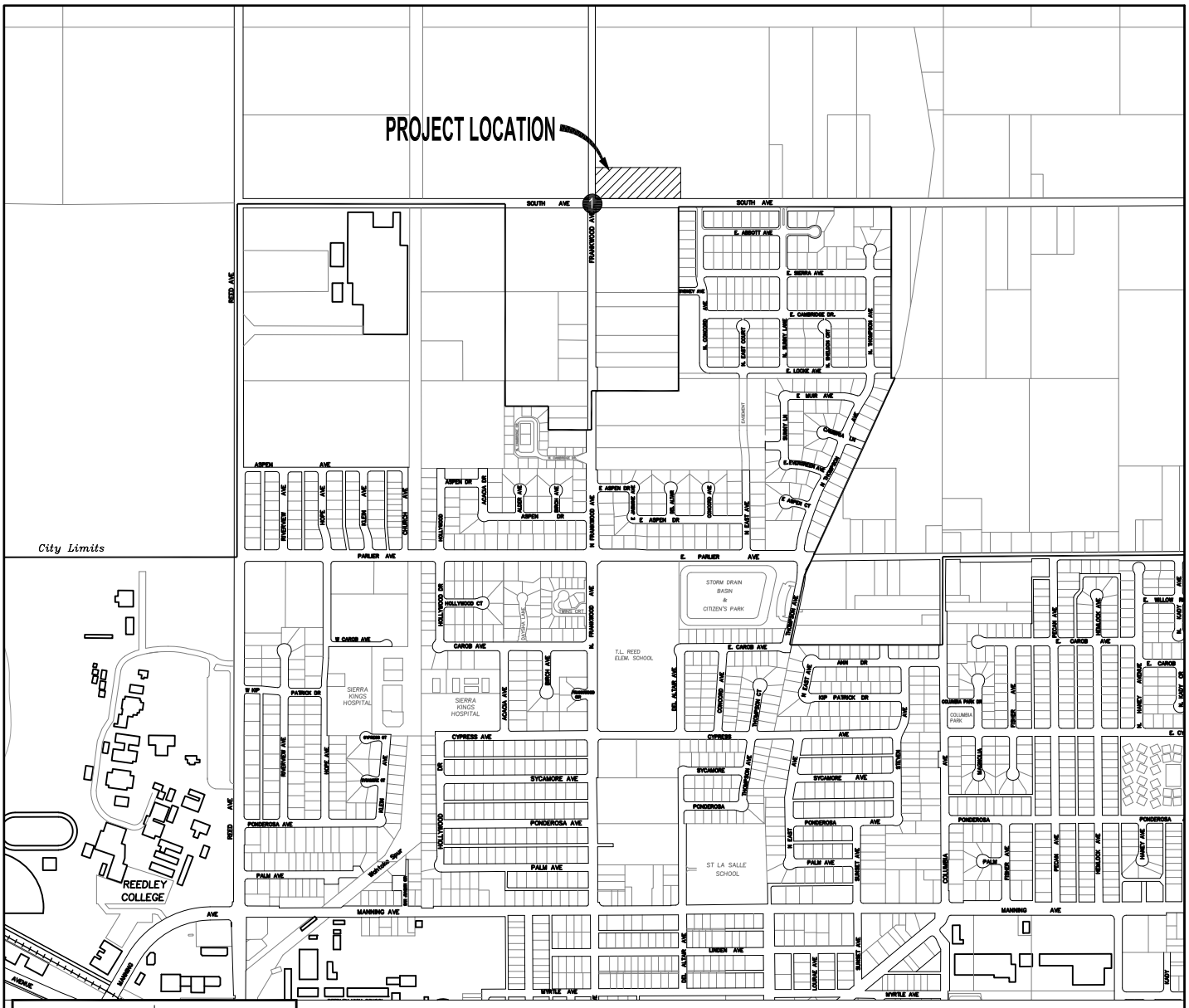
Not to Scale



Proposed Frankwood Commons Commercial Village
Reedley, California

SITE PLAN

Not to Scale



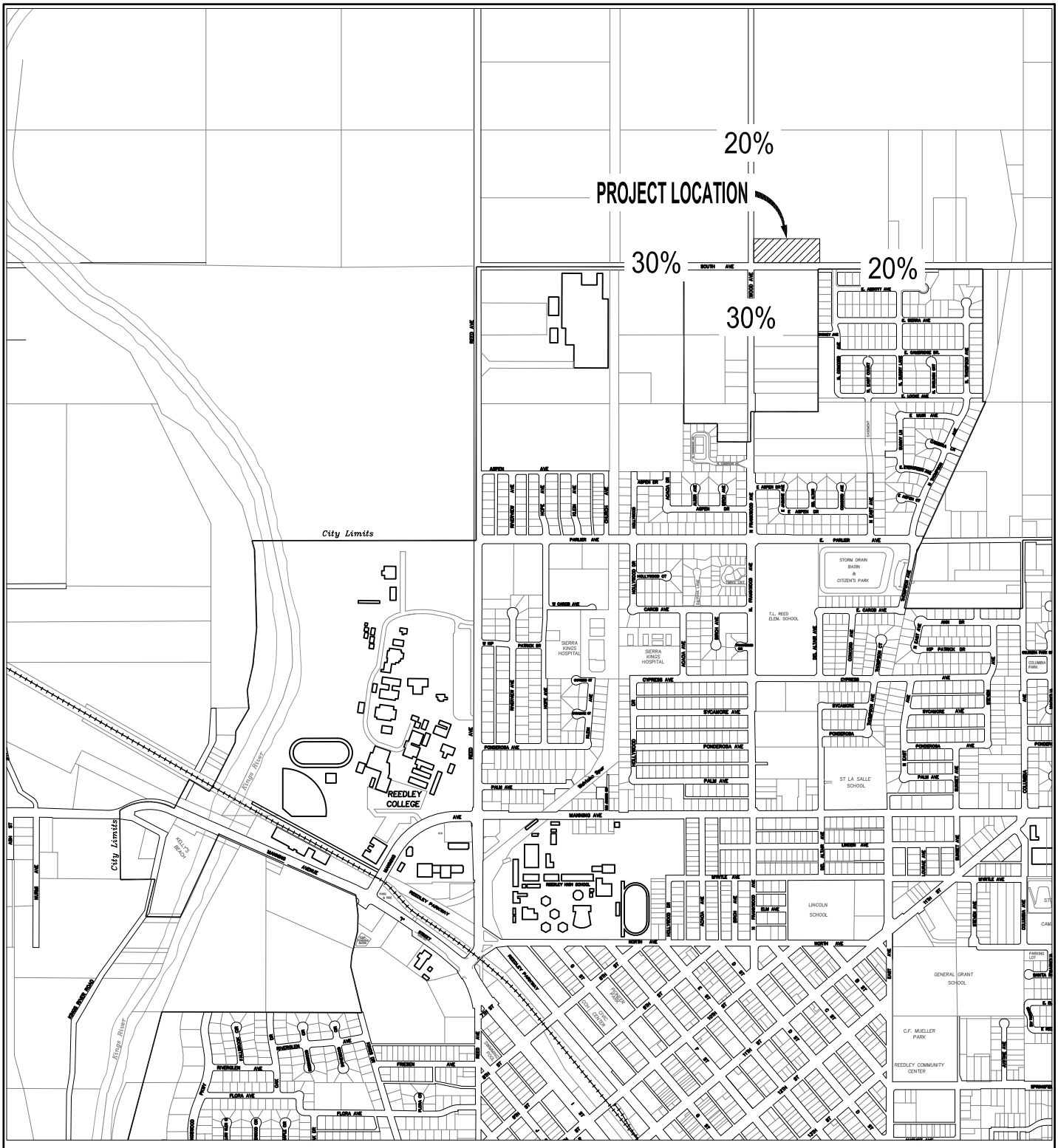
LEGEND

X	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) PEAK HOUR VOLUMES
	PROJECT SITE

Proposed Frankwood Commons Commercial Village
Reedley, California

EXISTING PEAK-HOUR TRAFFIC VOLUMES

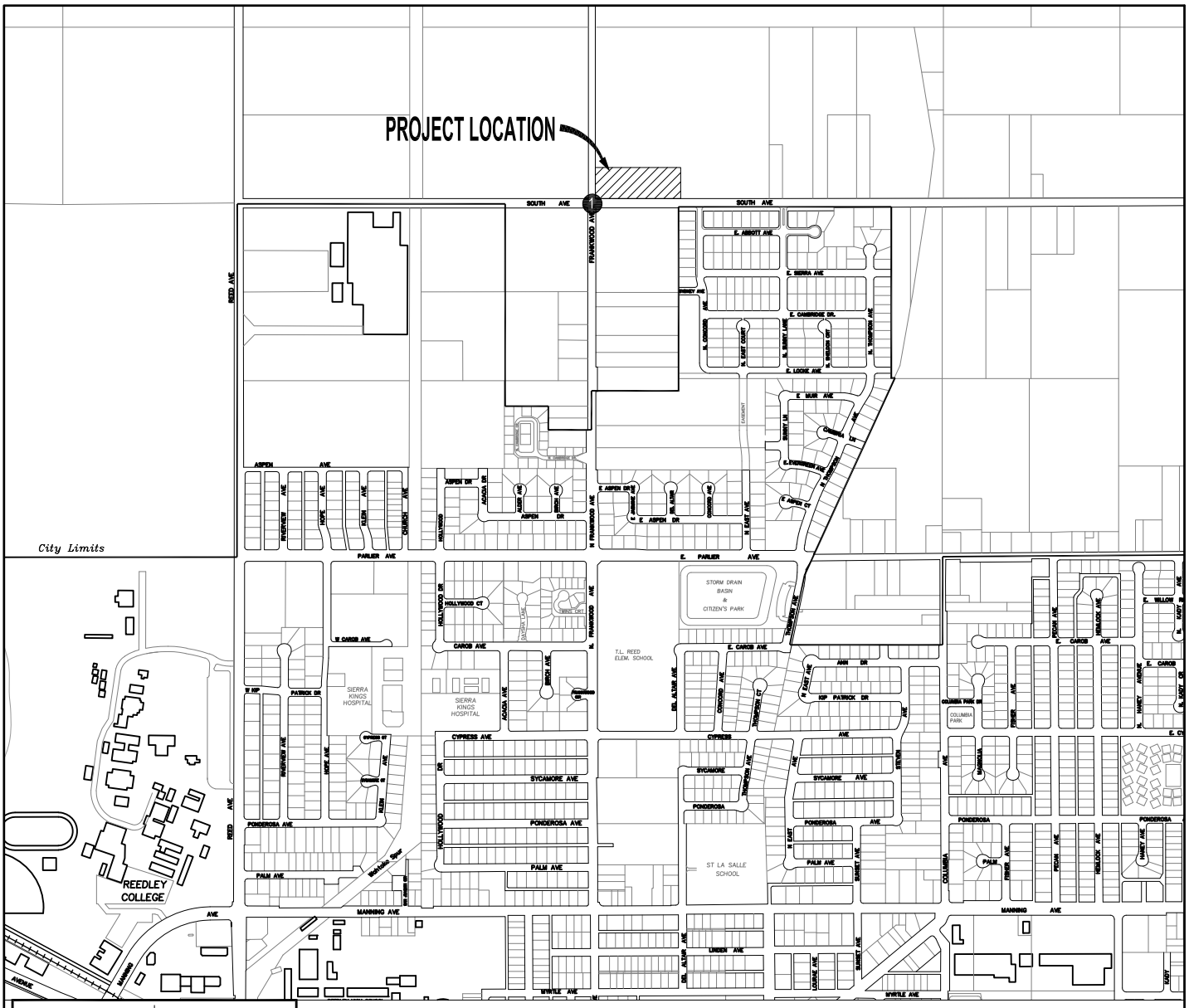
Not to Scale



Proposed Frankwood Commons Commercial Village
Reedley, California

PROJECT TRIP DISTRIBUTION PERCENTAGES

Not to Scale



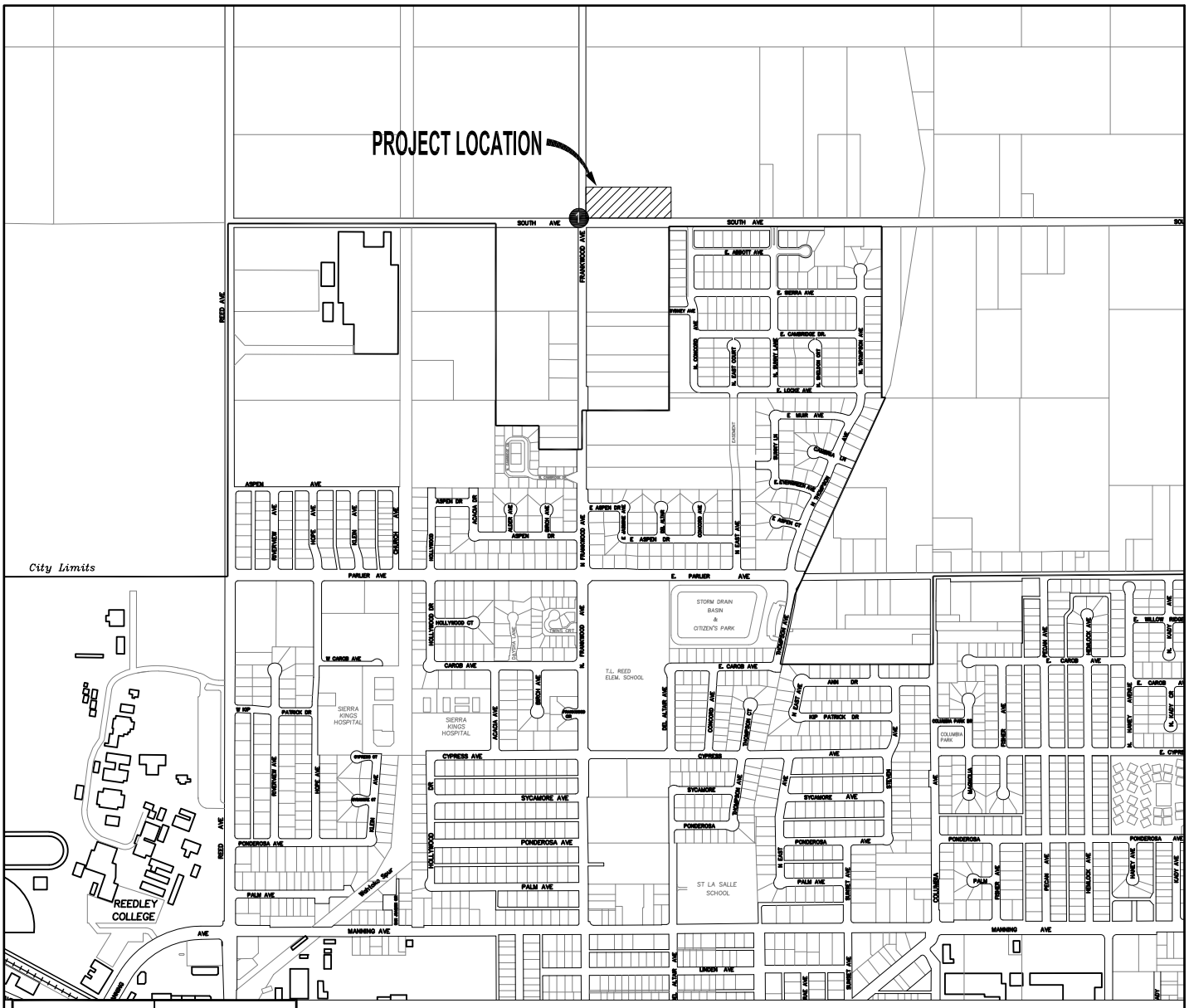
LEGEND

(X)	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) PEAK HOUR VOLUMES
	PROJECT SITE

Proposed Frankwood Commons Commercial Village
Reedley, California

PEAK-HOUR PRIMARY PROJECT TRIPS

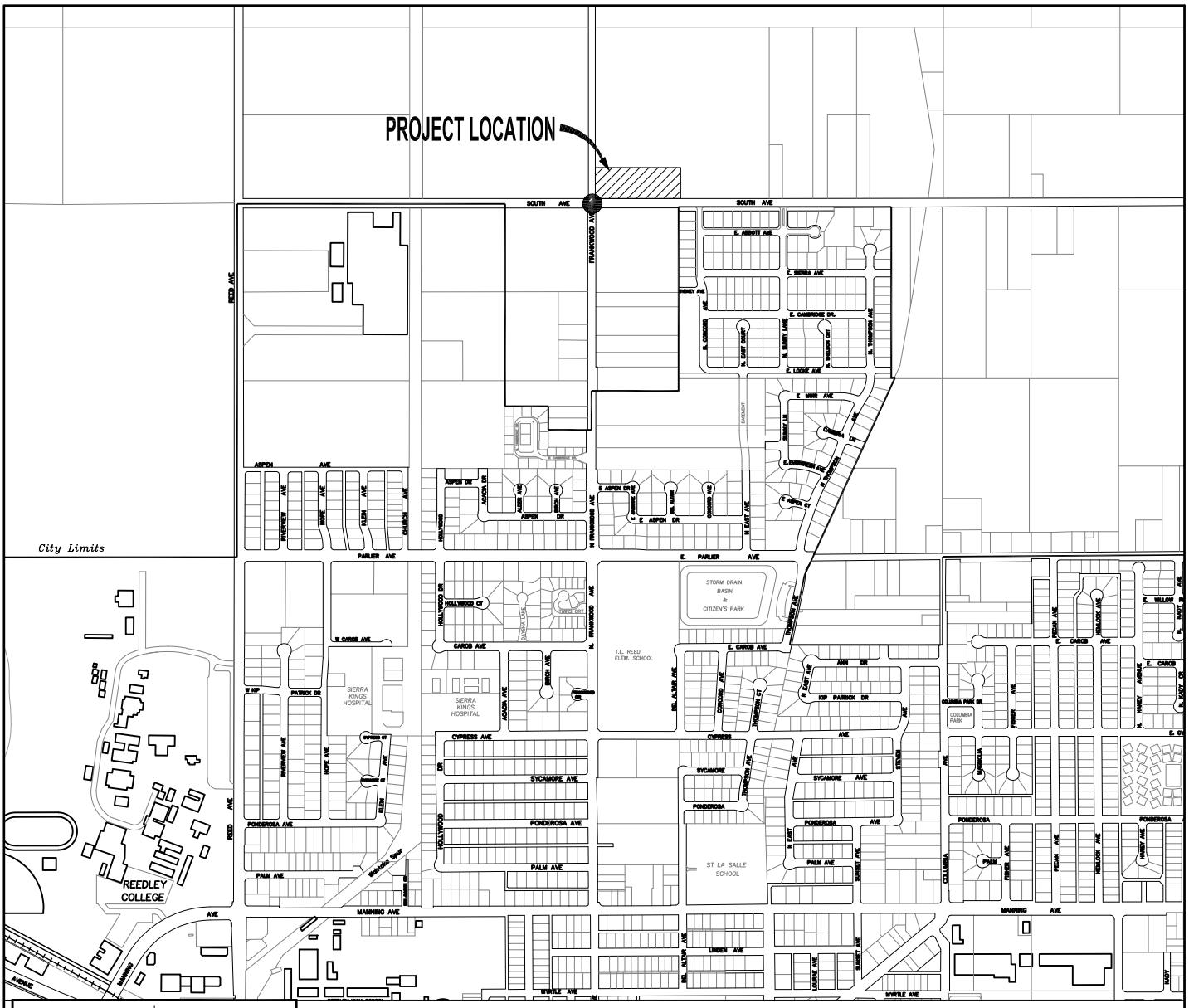
Not to Scale



Proposed Frankwood Commons Commercial Village
Reedley, California

EXISTING LANE CONFIGURATIONS AND STOP CONTROL

Not to Scale



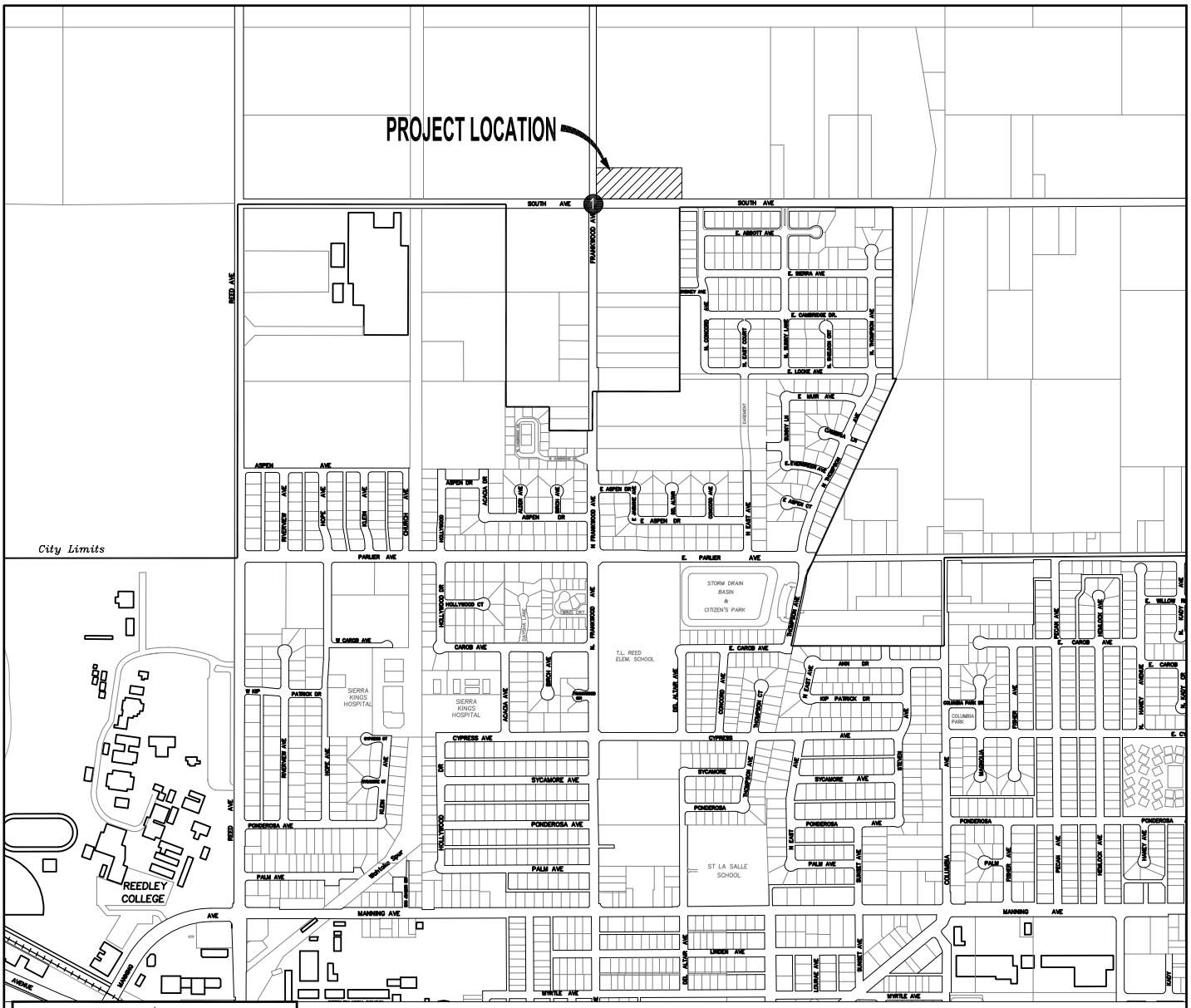
LEGEND

(X)	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) PEAK HOUR VOLUMES
	PROJECT SITE

Proposed Frankwood Commons Commercial Village
Reedley, California

EXISTING PLUS PROJECT PEAK-HOUR TRAFFIC VOLUMES

Not to Scale



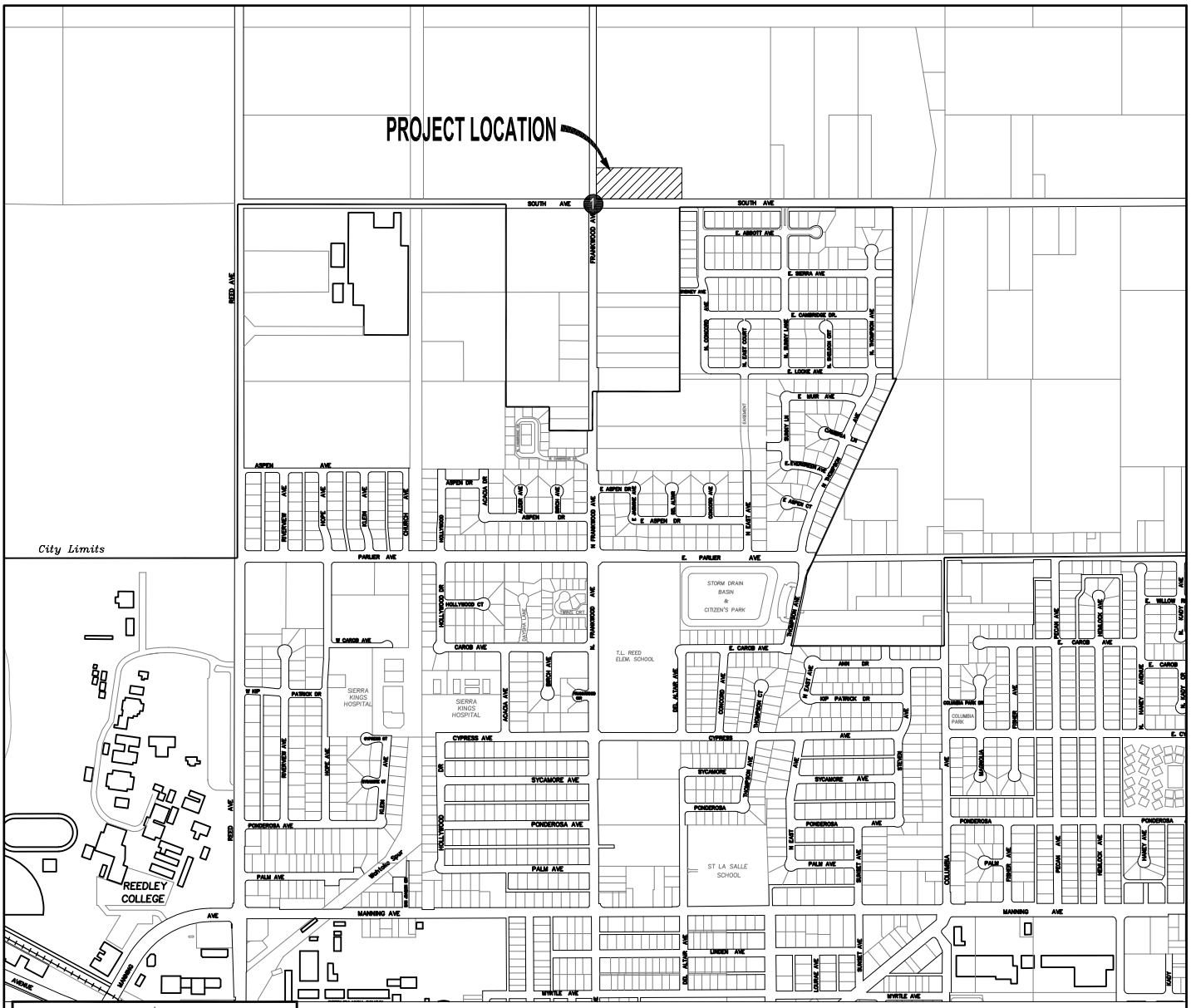
LEGEND

(X)	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) PEAK HOUR VOLUMES
	PROJECT SITE

Proposed Frankwood Commons Commercial Village
Reedley, California

NEAR-TERM WITH PROJECT PEAK-HOUR TRAFFIC VOLUMES

Not to Scale



LEGEND

(X)	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) PEAK HOUR VOLUMES
	PROJECT SITE

Proposed Frankwood Commons Commercial Village
Reedley, California

CUMULATIVE (YEAR 2044) WITH PROJECT PEAK-HOUR TRAFFIC VOLUMES

Not to Scale

APPENDIX A

TRAFFIC COUNT DATA SHEETS

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Ave
Clovis, CA 93612

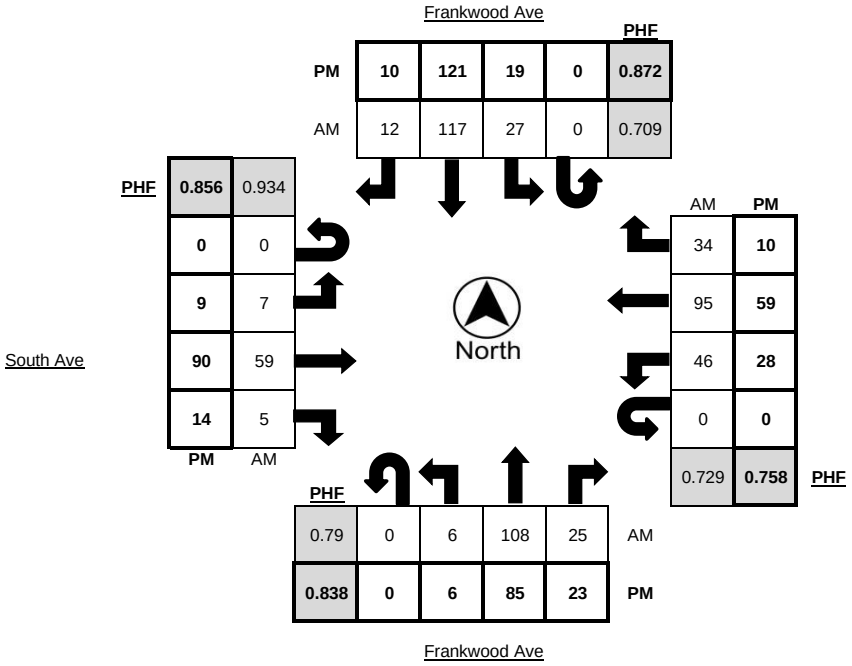
LOCATION Frankwood Ave @ South Ave
LATITUDE 36.6187
COUNTY Fresno
LONGITUDE -119.4488
COLLECTION DATE Tuesday, April 18, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	3	22	2	0	0	0	9	2	0	0	1	5	2	1	0	6	16	5	3
7:15 AM - 7:30 AM	0	2	21	6	1	0	1	20	2	2	0	1	15	1	3	0	10	27	6	6
7:30 AM - 7:45 AM	0	0	36	3	1	0	12	32	4	2	0	0	16	1	0	0	17	26	17	0
7:45 AM - 8:00 AM	0	2	33	9	1	0	8	44	3	1	0	4	14	1	3	0	14	24	9	1
8:00 AM - 8:15 AM	0	2	18	7	0	0	6	21	3	2	0	2	14	2	4	0	5	18	2	6
8:15 AM - 8:30 AM	0	3	14	5	0	0	0	10	0	0	0	0	11	1	3	0	3	16	6	4
8:30 AM - 8:45 AM	0	2	13	1	1	0	2	9	0	0	0	1	9	1	5	0	4	19	5	3
8:45 AM - 9:00 AM	0	4	7	2	1	0	0	13	3	1	0	3	10	2	2	0	5	12	1	1
TOTAL	**0**	**18**	**164**	**35**	**5**	**0**	**29**	**158**	**17**	**8**	**0**	**12**	**94**	**11**	**21**	**0**	**64**	**158**	**51**	**24**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	2	33	9	0	0	3	27	1	0	0	5	18	5	1	0	9	11	4	1
4:15 PM - 4:30 PM	0	0	24	9	0	0	3	20	1	0	0	2	13	4	0	0	6	13	5	2
4:30 PM - 4:45 PM	0	3	14	8	1	0	3	34	1	1	0	0	21	2	1	0	7	23	2	1
4:45 PM - 5:00 PM	0	1	25	4	2	0	8	31	4	1	0	3	17	5	2	0	9	16	2	1
5:00 PM - 5:15 PM	0	0	28	6	0	0	5	32	2	0	0	4	24	4	0	0	7	10	2	1
5:15 PM - 5:30 PM	0	2	18	5	1	0	3	24	3	0	0	2	28	3	2	0	5	10	4	0
5:30 PM - 5:45 PM	0	1	11	6	0	0	9	18	3	1	0	0	23	11	1	0	3	8	3	0
5:45 PM - 6:00 PM	0	1	13	8	0	0	6	24	2	0	0	4	19	2	0	0	9	17	1	0
TOTAL	**0**	**10**	**166**	**55**	**4**	**0**	**40**	**210**	**17**	**3**	**0**	**20**	**163**	**36**	**7**	**0**	**55**	**108**	**23**	**6**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:15 AM - 8:15 AM	0	6	108	25	3	0	27	117	12	7	0	7	59	5	10	0	46	95	34	13
4:30 PM - 5:30 PM	0	6	85	23	4	0	19	121	10	2	0	9	90	14	5	0	28	59	10	3

	PHF	Trucks
AM	0.820	6.1%
PM	0.948	3.0%



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Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Ave
Clovis, CA 93612

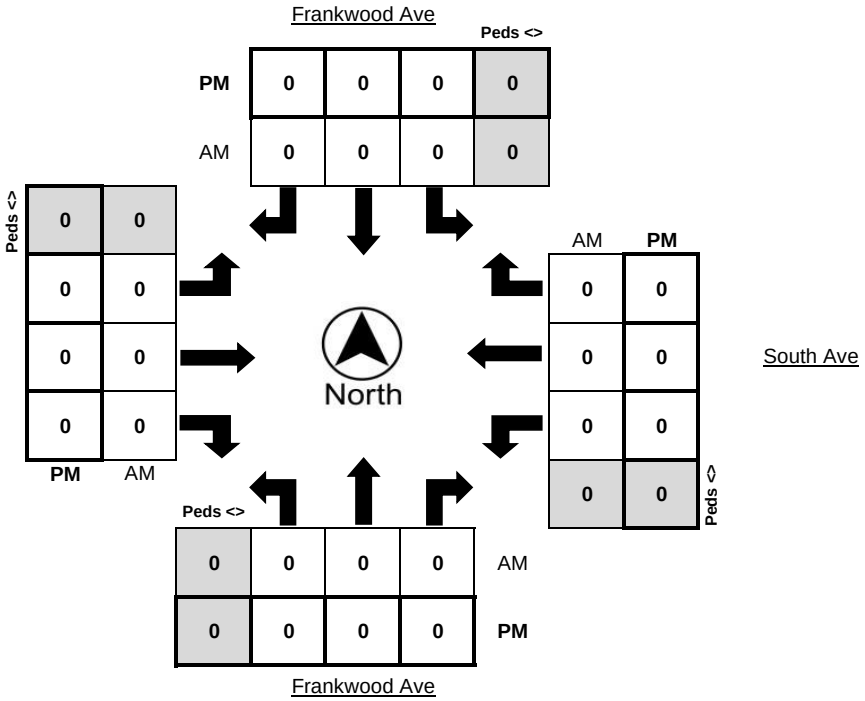
LOCATION Frankwood Ave @ South Ave
LATITUDE 36.6187
COUNTY Fresno
LONGITUDE -119.4488
COLLECTION DATE Tuesday, April 18, 2023
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	0	0
PM Peak Total	**0**	**0**



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www.metrotrafficdata.com

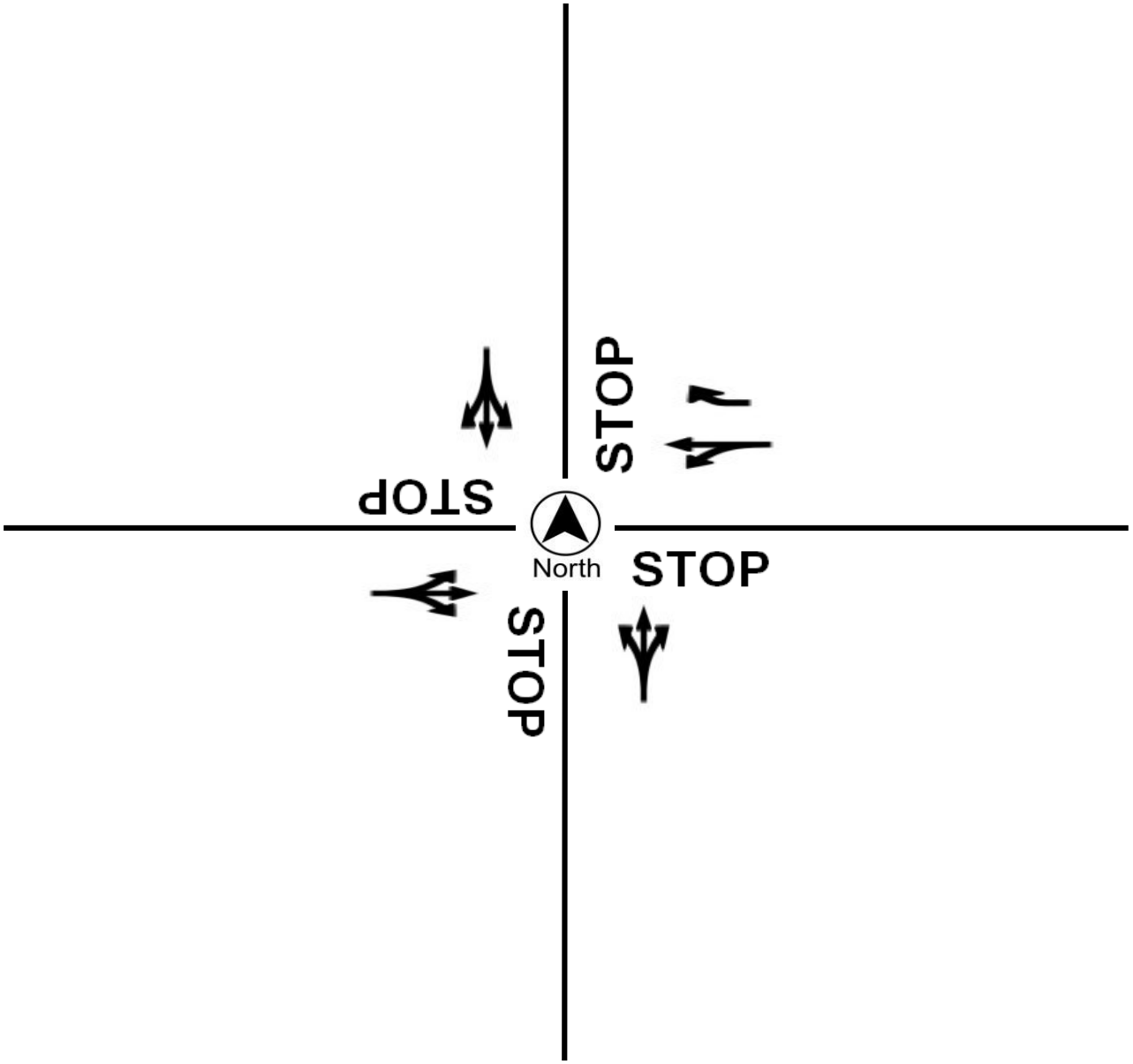
Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Ave
Clovis, CA 93612

LOCATION	Frankwood Ave @ South Ave	**N/S STREET**	Frankwood Ave
COUNTY	Fresno	**E/W STREET**	South Ave
COLLECTION DATE	Tuesday, April 18, 2023	**WEATHER**	Clear
CYCLE TIME	N/A	**CONTROL TYPE**	All-Way Stop

COMMENTS



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Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

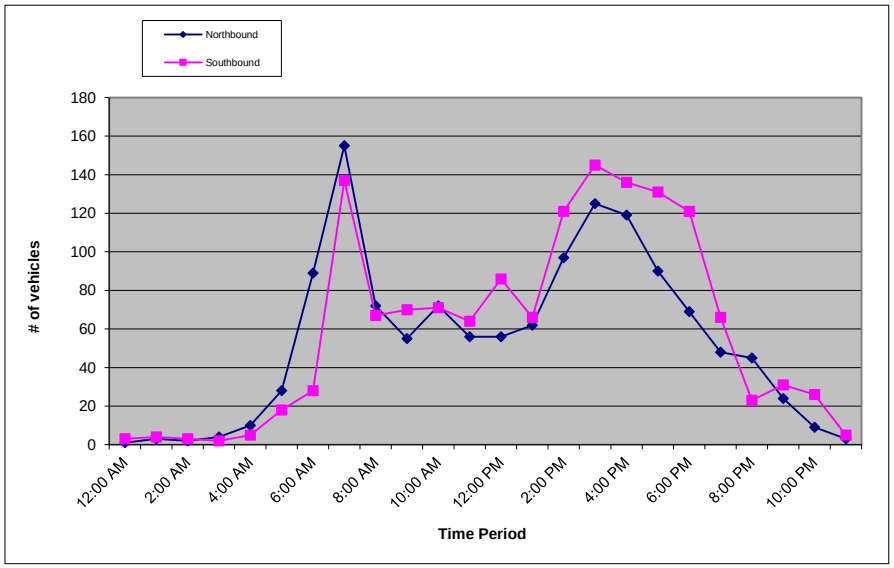
Prepared For: **Peters Engineering Group**
862 Pollasky Ave
Clovis, CA 93612

STREET Frankwood Ave
SEGMENT North of South Ave
COLLECTION DATE Tuesday, April 18, 2023
NUMBER OF LANES 2

LATITUDE 36.618956°
LONGITUDE -119.448750°
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	0	1	0	0	**1**	0	1	2	0	**3**	**4**
1:00 AM	0	0	3	0	**3**	2	1	1	0	**4**	**7**
2:00 AM	1	0	0	1	**2**	0	2	1	0	**3**	**5**
3:00 AM	0	1	2	1	**4**	0	0	0	2	**2**	**6**
4:00 AM	2	0	3	5	**10**	1	1	1	2	**5**	**15**
5:00 AM	2	4	7	15	**28**	2	4	3	9	**18**	**46**
6:00 AM	20	25	25	19	**89**	9	3	6	10	**28**	**117**
7:00 AM	28	28	53	46	**155**	11	23	48	55	**137**	**292**
8:00 AM	22	20	19	11	**72**	30	10	11	16	**67**	**139**
9:00 AM	16	12	15	12	**55**	21	16	15	18	**70**	**125**
10:00 AM	20	23	13	16	**72**	20	11	17	23	**71**	**143**
11:00 AM	12	13	14	17	**56**	17	24	10	13	**64**	**120**
12:00 PM	13	15	12	16	**56**	27	21	17	21	**86**	**142**
1:00 PM	16	13	16	17	**62**	16	15	20	15	**66**	**128**
2:00 PM	20	23	21	33	**97**	33	26	29	33	**121**	**218**
3:00 PM	35	36	29	25	**125**	31	45	31	38	**145**	**270**
4:00 PM	42	31	16	30	**119**	31	24	38	43	**136**	**255**
5:00 PM	34	24	14	18	**90**	39	30	30	32	**131**	**221**
6:00 PM	19	18	14	18	**69**	44	25	21	31	**121**	**190**
7:00 PM	16	9	10	13	**48**	20	17	17	12	**66**	**114**
8:00 PM	12	11	12	10	**45**	9	3	5	6	**23**	**68**
9:00 PM	4	8	5	7	**24**	9	12	5	5	**31**	**55**
10:00 PM	3	1	3	2	**9**	7	4	8	7	**26**	**35**
11:00 PM	1	1	0	1	**3**	3	1	0	1	**5**	**8**
Total	**47.5%**				**1294**	**52.5%**				**1429**	
	2723										

AM%	**37.4%**	**AM Peak**	**305**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.75**
PM%	**62.6%**	**PM Peak**	**277**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.85**



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24 Hour Count Report

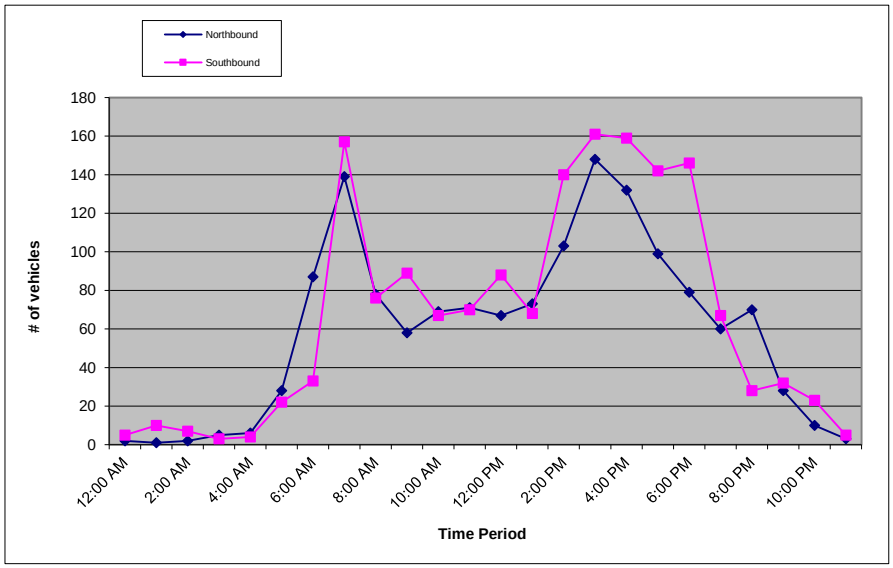
Prepared For: **Peters Engineering Group**
862 Pollasky Ave
Clovis, CA 93612

STREET Frankwood Ave
SEGMENT South of South Ave
COLLECTION DATE Tuesday, April 18, 2023
NUMBER OF LANES 2

LATITUDE 36.618443°
LONGITUDE -119.448759°
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	0	2	0	0	**2**	1	2	2	0	**5**	**7**
1:00 AM	0	0	0	1	**1**	1	2	5	2	**10**	**11**
2:00 AM	1	0	0	1	**2**	1	4	2	0	**7**	**9**
3:00 AM	0	1	2	2	**5**	1	0	0	2	**3**	**8**
4:00 AM	0	0	2	4	**6**	2	0	2	0	**4**	**10**
5:00 AM	2	4	10	12	**28**	3	3	4	12	**22**	**50**
6:00 AM	18	20	28	21	**87**	8	8	5	12	**33**	**120**
7:00 AM	27	29	39	44	**139**	17	31	50	59	**157**	**296**
8:00 AM	27	22	16	13	**78**	28	14	14	20	**76**	**154**
9:00 AM	15	13	14	16	**58**	28	18	19	24	**89**	**147**
10:00 AM	21	19	12	17	**69**	16	16	17	18	**67**	**136**
11:00 AM	15	16	19	21	**71**	15	21	12	22	**70**	**141**
12:00 PM	14	15	18	20	**67**	23	22	16	27	**88**	**155**
1:00 PM	15	19	17	22	**73**	17	13	19	19	**68**	**141**
2:00 PM	22	31	22	28	**103**	33	30	37	40	**140**	**243**
3:00 PM	34	48	40	26	**148**	35	42	42	42	**161**	**309**
4:00 PM	44	33	25	30	**132**	41	30	43	45	**159**	**291**
5:00 PM	34	25	18	22	**99**	43	32	32	35	**142**	**241**
6:00 PM	22	18	15	24	**79**	44	35	26	41	**146**	**225**
7:00 PM	17	19	10	14	**60**	21	15	18	13	**67**	**127**
8:00 PM	22	15	12	21	**70**	8	5	9	6	**28**	**98**
9:00 PM	5	9	8	6	**28**	5	10	11	6	**32**	**60**
10:00 PM	3	1	2	4	**10**	6	4	5	8	**23**	**33**
11:00 PM	1	1	1	0	**3**	3	1	0	1	**5**	**8**
Total	**47.0%**				**1418**	**53.0%**				**1602**	
	3020										

AM%	**36.1%**	**AM Peak**	**307**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.75**
PM%	**63.9%**	**PM Peak**	**325**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.90**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

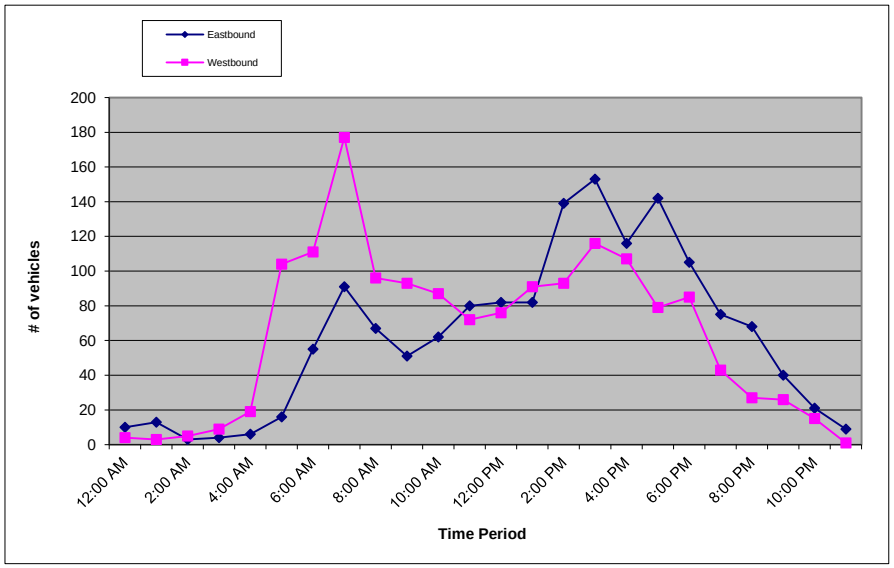
Prepared For: **Peters Engineering Group**
862 Pollasky Ave
Clovis, CA 93612

STREET South Ave
SEGMENT East of Frankwood Ave
COLLECTION DATE Tuesday, April 18, 2023
NUMBER OF LANES 2

LATITUDE 36.618701°
LONGITUDE -119.448411°
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	3	6	1	0	**10**	1	2	1	0	**4**	**14**
1:00 AM	1	5	4	3	**13**	1	1	1	0	**3**	**16**
2:00 AM	3	0	0	0	**3**	3	0	1	1	**5**	**8**
3:00 AM	1	1	0	2	**4**	2	1	3	3	**9**	**13**
4:00 AM	2	0	2	2	**6**	3	4	5	7	**19**	**25**
5:00 AM	1	5	6	4	**16**	12	22	32	38	**104**	**120**
6:00 AM	20	10	11	14	**55**	22	32	32	25	**111**	**166**
7:00 AM	7	22	31	31	**91**	27	43	60	47	**177**	**268**
8:00 AM	27	16	12	12	**67**	25	25	28	18	**96**	**163**
9:00 AM	12	11	10	18	**51**	33	22	17	21	**93**	**144**
10:00 AM	18	16	12	16	**62**	21	26	21	19	**87**	**149**
11:00 AM	19	19	21	21	**80**	15	11	23	23	**72**	**152**
12:00 PM	21	20	19	22	**82**	14	17	16	29	**76**	**158**
1:00 PM	22	21	18	21	**82**	21	21	25	24	**91**	**173**
2:00 PM	31	34	37	37	**139**	19	31	19	24	**93**	**232**
3:00 PM	37	47	36	33	**153**	39	26	34	17	**116**	**269**
4:00 PM	30	25	32	29	**116**	24	24	32	27	**107**	**223**
5:00 PM	35	36	38	33	**142**	19	19	14	27	**79**	**221**
6:00 PM	39	22	26	18	**105**	20	23	22	20	**85**	**190**
7:00 PM	19	22	20	14	**75**	14	8	7	14	**43**	**118**
8:00 PM	18	17	11	22	**68**	8	7	7	5	**27**	**95**
9:00 PM	14	12	7	7	**40**	3	5	12	6	**26**	**66**
10:00 PM	6	3	5	7	**21**	7	3	2	3	**15**	**36**
11:00 PM	1	2	4	2	**9**	0	0	0	1	**1**	**10**
Total	**49.2%**				**1490**	**50.8%**				**1539**	
	3029										

AM%	**40.9%**	**AM Peak**	**286**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.79**
PM%	**59.1%**	**PM Peak**	**280**	**2:45 pm to 3:45 pm**	**PM P.H.F.**	**0.92**



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24 Hour Count Report

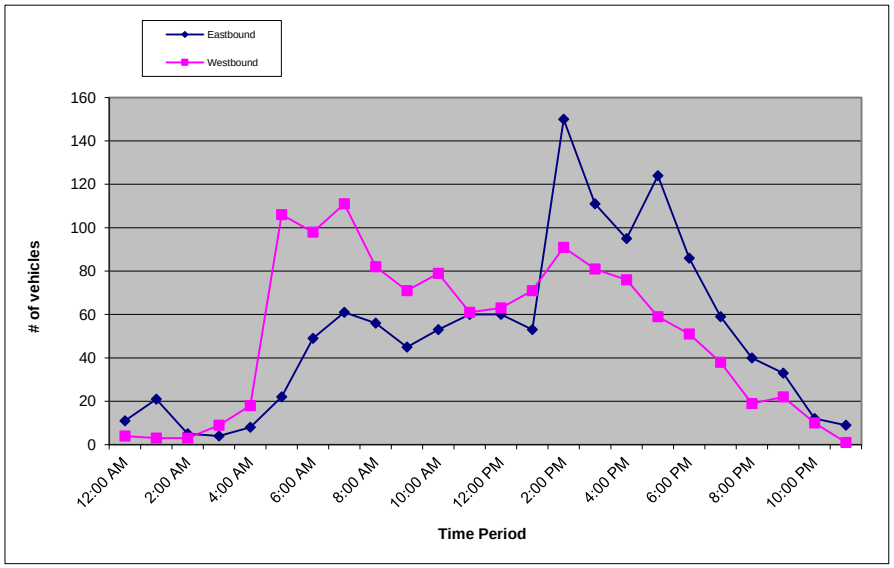
Prepared For: **Peters Engineering Group**
862 Pollasky Ave
Clovis, CA 93612

STREET South Ave
SEGMENT West of Frankwood Ave
COLLECTION DATE Tuesday, April 18, 2023
NUMBER OF LANES 2

LATITUDE 36.618706°
LONGITUDE -119.449113°
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	4	6	1	0	**11**	1	2	1	0	**4**	**15**
1:00 AM	0	6	11	4	**21**	1	1	1	0	**3**	**24**
2:00 AM	3	2	0	0	**5**	2	0	0	1	**3**	**8**
3:00 AM	2	1	0	1	**4**	2	1	3	3	**9**	**13**
4:00 AM	3	0	3	2	**8**	1	5	4	8	**18**	**26**
5:00 AM	2	4	7	9	**22**	12	22	35	37	**106**	**128**
6:00 AM	20	12	8	9	**49**	21	24	33	20	**98**	**147**
7:00 AM	8	17	17	19	**61**	21	31	30	29	**111**	**172**
8:00 AM	18	12	11	15	**56**	23	19	21	19	**82**	**138**
9:00 AM	13	7	10	15	**45**	26	17	12	16	**71**	**116**
10:00 AM	15	18	10	10	**53**	23	19	18	19	**79**	**132**
11:00 AM	12	16	15	17	**60**	13	14	20	14	**61**	**121**
12:00 PM	14	19	11	16	**60**	12	15	15	21	**63**	**123**
1:00 PM	19	10	10	14	**53**	16	18	19	18	**71**	**124**
2:00 PM	32	35	40	43	**150**	22	36	15	18	**91**	**241**
3:00 PM	30	28	24	29	**111**	27	22	22	10	**81**	**192**
4:00 PM	28	19	23	25	**95**	14	14	27	21	**76**	**171**
5:00 PM	32	33	34	25	**124**	12	15	12	20	**59**	**183**
6:00 PM	29	22	23	12	**86**	13	13	15	10	**51**	**137**
7:00 PM	19	10	20	10	**59**	14	8	6	10	**38**	**97**
8:00 PM	9	13	9	9	**40**	10	5	1	3	**19**	**59**
9:00 PM	10	9	6	8	**33**	4	5	8	5	**22**	**55**
10:00 PM	3	2	2	5	**12**	5	2	1	2	**10**	**22**
11:00 PM	1	2	3	3	**9**	0	0	0	1	**1**	**10**
Total	**50.0%**				**1227**	**50.0%**				**1227**	
	2454										

AM%	**42.4%**	**AM Peak**	**184**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.96**
PM%	**57.6%**	**PM Peak**	**244**	**2:15 pm to 3:15 pm**	**PM P.H.F.**	**0.86**

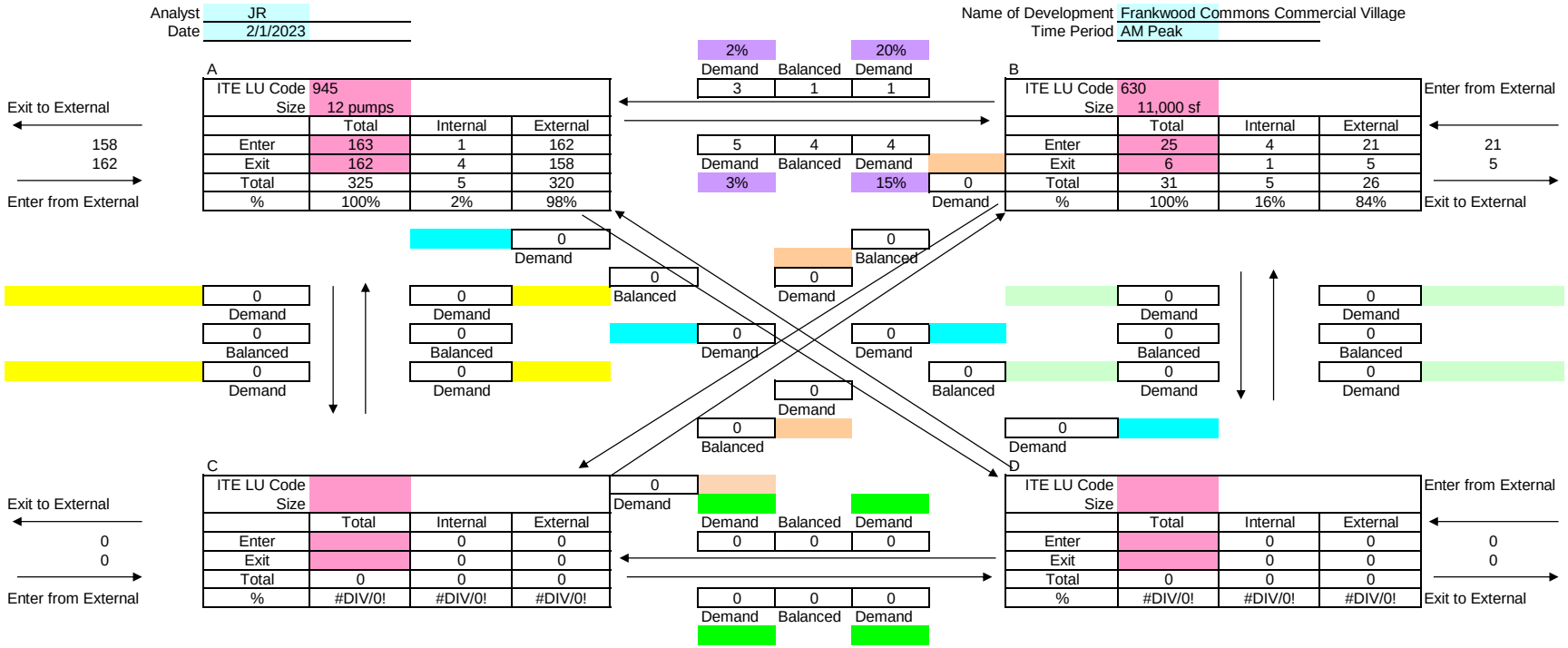


APPENDIX B

INTERNAL CAPTURE ANALYSES

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	162	21	0	0	183
Exit	158	5	0	0	163
Total	320	26	0	0	346
Single-Use Trip Gen. Est.	325	31	0	0	356

INTERNAL CAPTURE 2.8%

ITE Totals	Captured
188	5
168	5

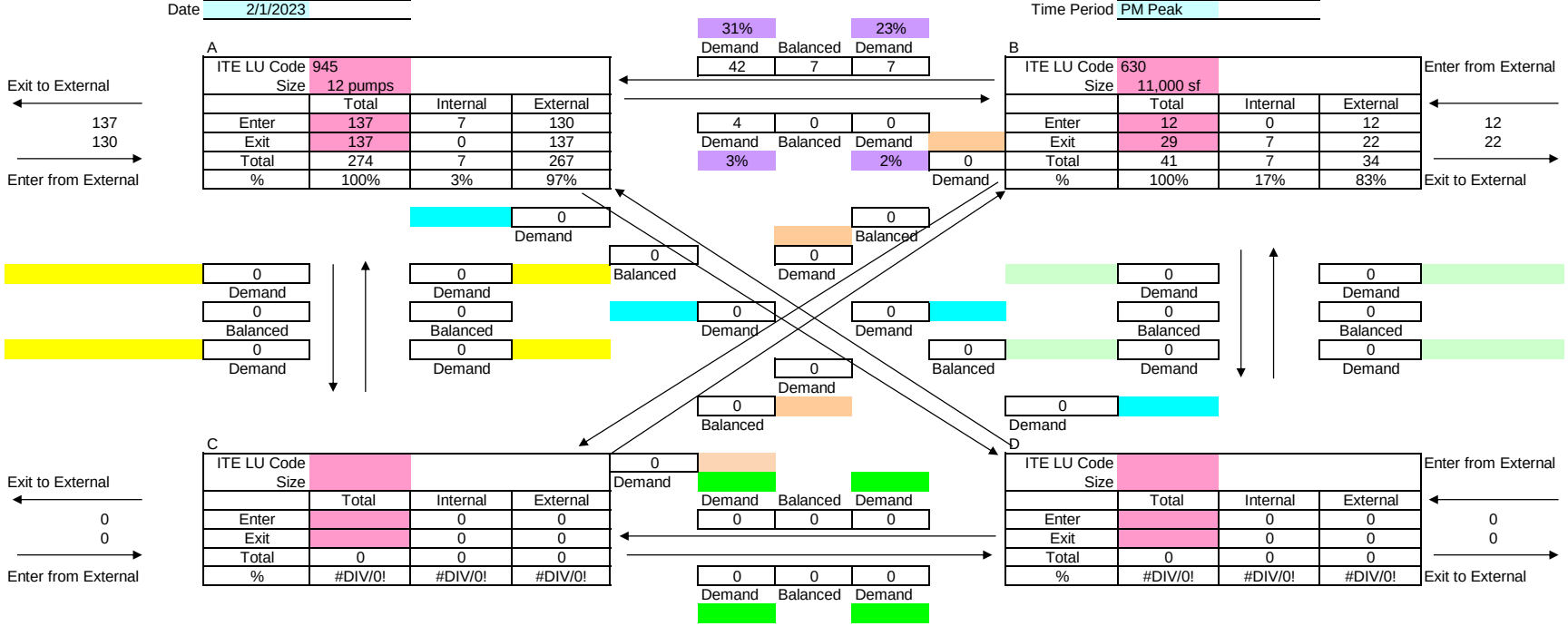
Pass-By Trips

Pass-by %:	0%	50%	50%	
	Land Use A	Land Use B	Land Use C	Total
	0	10	0	10
	0	2	0	2

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

Analyst: JR
Date: 2/1/2023

Name of Development: Frankwood Commons Commercial Village
Time Period: PM Peak



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	130	12	0	0	142
Exit	137	22	0	0	159
Total	267	34	0	0	301
Single-Use Trip Gen. Est.	274	41	0	0	315

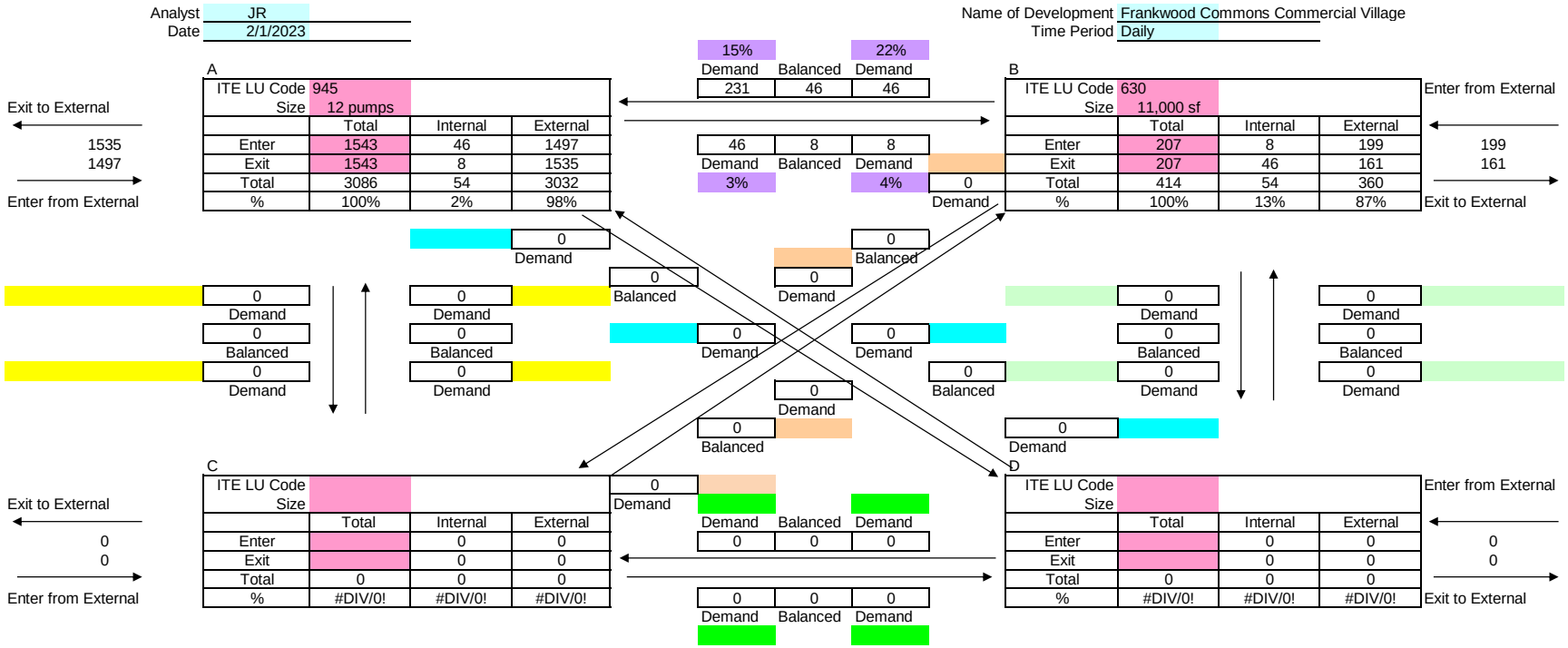
INTERNAL CAPTURE 4.4%

	ITE Totals	Captured
Enter	149	7
Exit	166	7

Pass-By Trips

Pass-by %:	20%	50%	50%	
	Land Use A	Land Use B	Land Use C	Total
Enter	26	5	0	31
Exit	27	11	0	38

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	1497	199	0	0	1696
Exit	1535	161	0	0	1696
Total	3032	360	0	0	3392
Single-Use Trip Gen. Est.	3086	414	0	0	3500

INTERNAL CAPTURE 3.1%

ITE Totals	Captured
1750	54
1750	54

Pass-By Trips

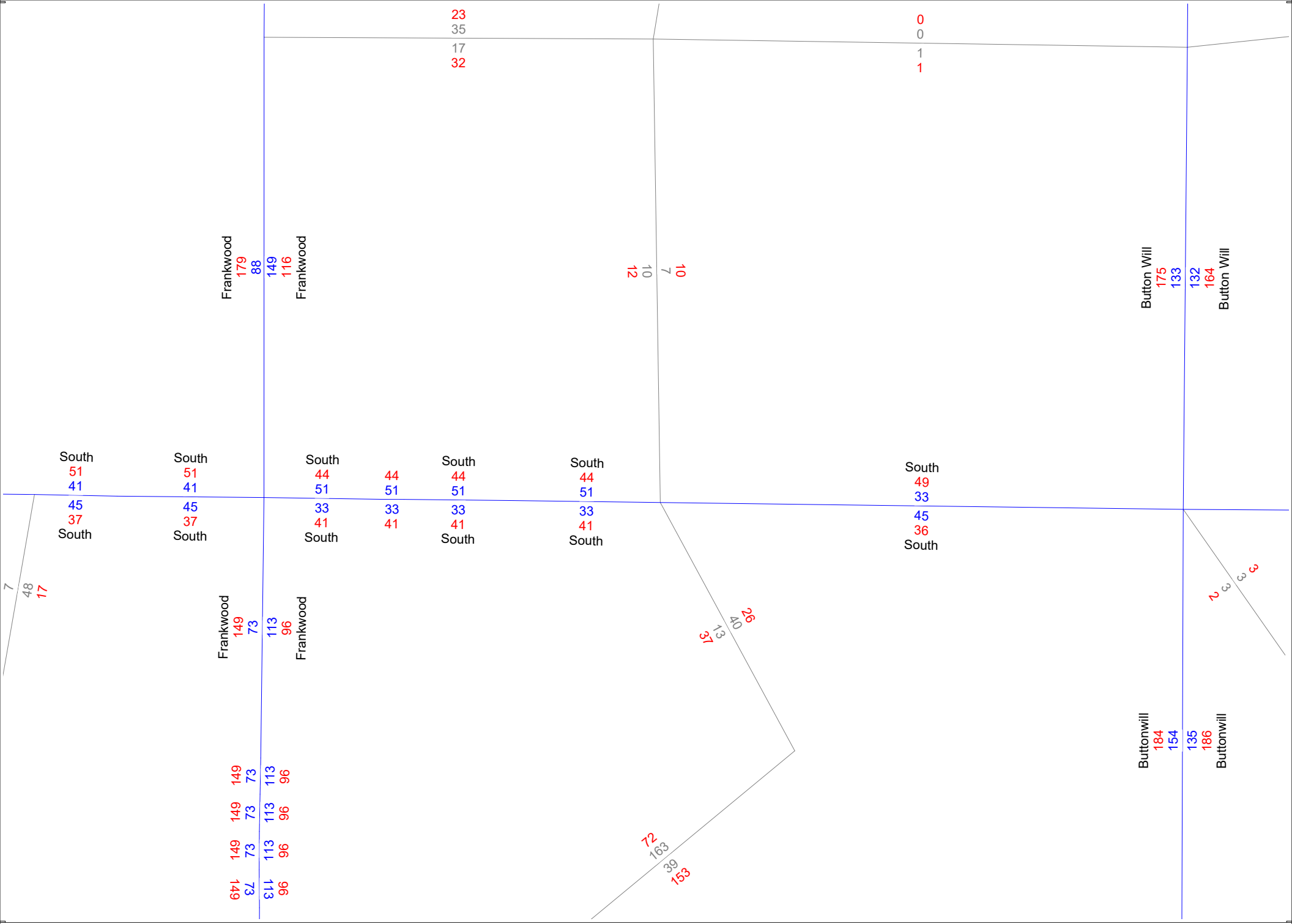
Pass-by %:

Land Use A	Land Use B	Land Use C	Total
0	0	0	0
0	0	0	0

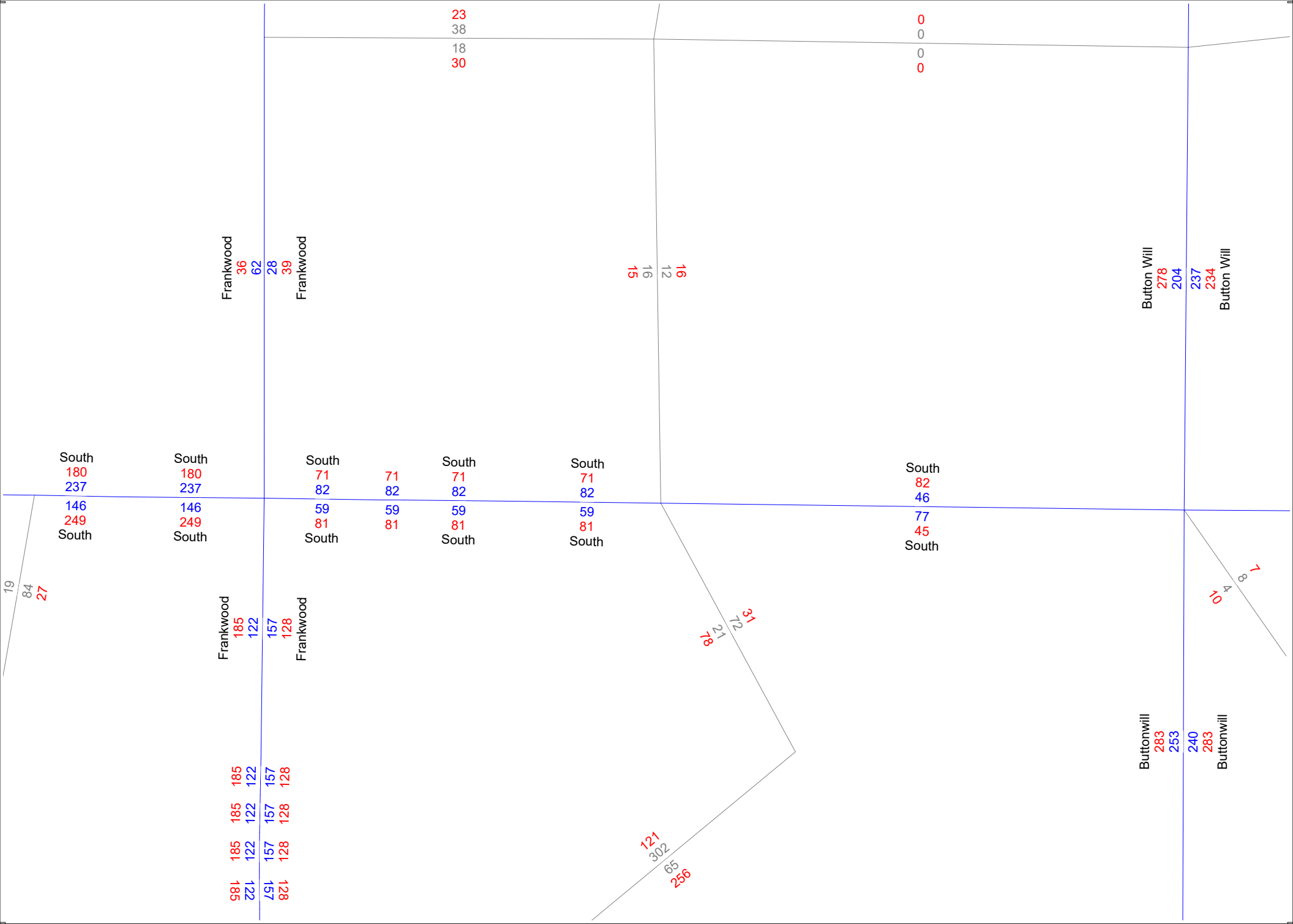
APPENDIX C

FRESNO COUNTY TRAVEL MODEL

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION



2019 Fresno County Travel Model
AM and PM Peak Hour Traffic Volumes



2035 Fresno County Travel Model
AM and PM Peak Hour Traffic Volumes

APPENDIX D

INTERSECTION ANALYSIS SHEETS

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	59	5	46	95	34	6	108	25	27	117	12
Future Vol, veh/h	7	59	5	46	95	34	6	108	25	27	117	12
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	9	72	6	56	116	41	7	132	30	33	143	15
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	9.1	10.2	9.5	9.9
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	4%	10%	33%	0%	17%
Vol Thru, %	78%	83%	67%	0%	75%
Vol Right, %	18%	7%	0%	100%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	139	71	141	34	156
LT Vol	6	7	46	0	27
Through Vol	108	59	95	0	117
RT Vol	25	5	0	34	12
Lane Flow Rate	170	87	172	41	190
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.233	0.127	0.274	0.056	0.264
Departure Headway (Hd)	4.944	5.275	5.741	4.87	5.001
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	720	672	621	728	713
Service Time	3.015	3.367	3.521	2.649	3.07
HCM Lane V/C Ratio	0.236	0.129	0.277	0.056	0.266
HCM Control Delay	9.5	9.1	10.7	7.9	9.9
HCM Lane LOS	A	A	B	A	A
HCM 95th-tile Q	0.9	0.4	1.1	0.2	1.1

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	90	14	28	59	10	6	85	23	19	121	10
Future Vol, veh/h	9	90	14	28	59	10	6	85	23	19	121	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	95	15	29	62	11	6	89	24	20	127	11
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	8.7	8.9	8.5	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	8%	32%	0%	13%
Vol Thru, %	75%	80%	68%	0%	81%
Vol Right, %	20%	12%	0%	100%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	114	113	87	10	150
LT Vol	6	9	28	0	19
Through Vol	85	90	59	0	121
RT Vol	23	14	0	10	10
Lane Flow Rate	120	119	92	11	158
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.153	0.158	0.139	0.013	0.203
Departure Headway (Hd)	4.588	4.786	5.479	4.612	4.637
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	780	748	654	774	774
Service Time	2.623	2.826	3.221	2.353	2.67
HCM Lane V/C Ratio	0.154	0.159	0.141	0.014	0.204
HCM Control Delay	8.5	8.7	9.1	7.4	8.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.6	0.5	0	0.8

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	63	5	48	97	39	6	142	29	31	148	43
Future Vol, veh/h	42	63	5	48	97	39	6	142	29	31	148	43
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	51	77	6	59	118	48	7	173	35	38	180	52
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	10.6	11.2	11	11.9
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	3%	38%	33%	0%	14%
Vol Thru, %	80%	57%	67%	0%	67%
Vol Right, %	16%	5%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	177	110	145	39	222
LT Vol	6	42	48	0	31
Through Vol	142	63	97	0	148
RT Vol	29	5	0	39	43
Lane Flow Rate	216	134	177	48	271
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.324	0.22	0.31	0.072	0.401
Departure Headway (Hd)	5.409	5.905	6.31	5.432	5.326
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	663	606	569	659	674
Service Time	3.451	3.953	4.051	3.172	3.364
HCM Lane V/C Ratio	0.326	0.221	0.311	0.073	0.402
HCM Control Delay	11	10.6	11.9	8.6	11.9
HCM Lane LOS	B	B	B	A	B
HCM 95th-tile Q	1.4	0.8	1.3	0.2	1.9

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	93	14	34	65	14	6	110	26	23	148	37
Future Vol, veh/h	34	93	14	34	65	14	6	110	26	23	148	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	98	15	36	68	15	6	116	27	24	156	39
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	9.5	9.5	9.1	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	4%	24%	34%	0%	11%
Vol Thru, %	77%	66%	66%	0%	71%
Vol Right, %	18%	10%	0%	100%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	141	99	14	208
LT Vol	6	34	34	0	23
Through Vol	110	93	65	0	148
RT Vol	26	14	0	14	37
Lane Flow Rate	149	148	104	15	219
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.2	0.21	0.167	0.02	0.289
Departure Headway (Hd)	4.824	5.093	5.763	4.882	4.754
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	738	699	618	726	751
Service Time	2.889	3.167	3.539	2.658	2.813
HCM Lane V/C Ratio	0.202	0.212	0.168	0.021	0.292
HCM Control Delay	9.1	9.5	9.7	7.8	9.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.7	0.8	0.6	0.1	1.2

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	71	8	58	112	39	12	148	36	31	158	46
Future Vol, veh/h	45	71	8	58	112	39	12	148	36	31	158	46
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	55	87	10	71	137	48	15	180	44	38	193	56
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	11.3	12.4	12.1	13
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	36%	34%	0%	13%
Vol Thru, %	76%	57%	66%	0%	67%
Vol Right, %	18%	6%	0%	100%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	196	124	170	39	235
LT Vol	12	45	58	0	31
Through Vol	148	71	112	0	158
RT Vol	36	8	0	39	46
Lane Flow Rate	239	151	207	48	287
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.374	0.258	0.375	0.074	0.443
Departure Headway (Hd)	5.637	6.135	6.513	5.627	5.561
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	636	582	551	634	645
Service Time	3.7	4.205	4.274	3.388	3.621
HCM Lane V/C Ratio	0.376	0.259	0.376	0.076	0.445
HCM Control Delay	12.1	11.3	13.2	8.8	13
HCM Lane LOS	B	B	B	A	B
HCM 95th-tile Q	1.7	1	1.7	0.2	2.3

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	109	20	41	75	14	9	121	38	23	155	42
Future Vol, veh/h	39	109	20	41	75	14	9	121	38	23	155	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	41	115	21	43	79	15	9	127	40	24	163	44
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	10.2	10.1	9.8	10.4
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	23%	35%	0%	10%
Vol Thru, %	72%	65%	65%	0%	70%
Vol Right, %	23%	12%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	168	168	116	14	220
LT Vol	9	39	41	0	23
Through Vol	121	109	75	0	155
RT Vol	38	20	0	14	42
Lane Flow Rate	177	177	122	15	232
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.249	0.262	0.205	0.021	0.323
Departure Headway (Hd)	5.075	5.33	6.03	5.143	5.026
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	711	676	596	697	718
Service Time	3.082	3.356	3.757	2.869	3.032
HCM Lane V/C Ratio	0.249	0.262	0.205	0.022	0.323
HCM Control Delay	9.8	10.2	10.3	8	10.4
HCM Lane LOS	A	B	B	A	B
HCM 95th-tile Q	1	1	0.8	0.1	1.4

Intersection	
Intersection Delay, s/veh	18.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	85	37	69	134	47	75	173	45	37	185	56
Future Vol, veh/h	47	85	37	69	134	47	75	173	45	37	185	56
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	57	104	45	84	163	57	91	211	55	45	226	68
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	15.2	16.8	21.2	19.7
HCM LOS	C	C	C	C

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	26%	28%	34%	0%	13%
Vol Thru, %	59%	50%	66%	0%	67%
Vol Right, %	15%	22%	0%	100%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	293	169	203	47	278
LT Vol	75	47	69	0	37
Through Vol	173	85	134	0	185
RT Vol	45	37	0	47	56
Lane Flow Rate	357	206	248	57	339
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.651	0.411	0.519	0.106	0.617
Departure Headway (Hd)	6.559	7.173	7.551	6.658	6.553
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	547	499	475	535	549
Service Time	4.636	5.264	5.332	4.438	4.632
HCM Lane V/C Ratio	0.653	0.413	0.522	0.107	0.617
HCM Control Delay	21.2	15.2	18.3	10.2	19.7
HCM Lane LOS	C	C	C	B	C
HCM 95th-tile Q	4.7	2	2.9	0.4	4.2

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	130	92	47	89	16	51	141	47	27	183	51
Future Vol, veh/h	41	130	92	47	89	16	51	141	47	27	183	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	43	137	97	49	94	17	54	148	49	28	193	54
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	13.2	11.6	12.5	12.9
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	21%	16%	35%	0%	10%
Vol Thru, %	59%	49%	65%	0%	70%
Vol Right, %	20%	35%	0%	100%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	239	263	136	16	261
LT Vol	51	41	47	0	27
Through Vol	141	130	89	0	183
RT Vol	47	92	0	16	51
Lane Flow Rate	252	277	143	17	275
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.396	0.438	0.265	0.027	0.428
Departure Headway (Hd)	5.67	5.696	6.671	5.781	5.61
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	631	628	535	615	637
Service Time	3.742	3.765	4.448	3.559	3.679
HCM Lane V/C Ratio	0.399	0.441	0.267	0.028	0.432
HCM Control Delay	12.5	13.2	11.9	8.7	12.9
HCM Lane LOS	B	B	B	A	B
HCM 95th-tile Q	1.9	2.2	1.1	0.1	2.1

APPENDIX E

TRAFFIC SIGNAL WARRANT ANALYSES

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 4-18-23

DIST ____ CO ____ RTE ____ PM ____

CALC JR DATE 5-2-23

CHK ____ DATE ____

Major St: FRANKWOOD

Minor St: SOUTH

Critical Approach Speed 45 mph

Critical Approach Speed 40 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒ } RURAL (R)

In built up area of isolated community of < 10,000 population..... ☐ } or

☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☒

(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume 100% SATISFIED YES ☐ NO ☒

80% SATISFIED YES ☐ NO ☒

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R									
APPROACH LANES	1		2 or More										Hour
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	(295)	(303)							
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	175	109							

715 1515

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES ☐ NO ☒

80% SATISFIED YES ☐ NO ☒

NONE

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R									
APPROACH LANES	1		2 or More										Hour
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)									
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)									

Combination of Conditions A & B SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☒
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☒**

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	Hour			
Both Approaches - Major Street						
Higher Approach - Minor Street						

NONE ABOVE LINE

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☐ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☒
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☒ No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐ No ☒

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PART B **SATISFIED YES ☐ NO ☒**

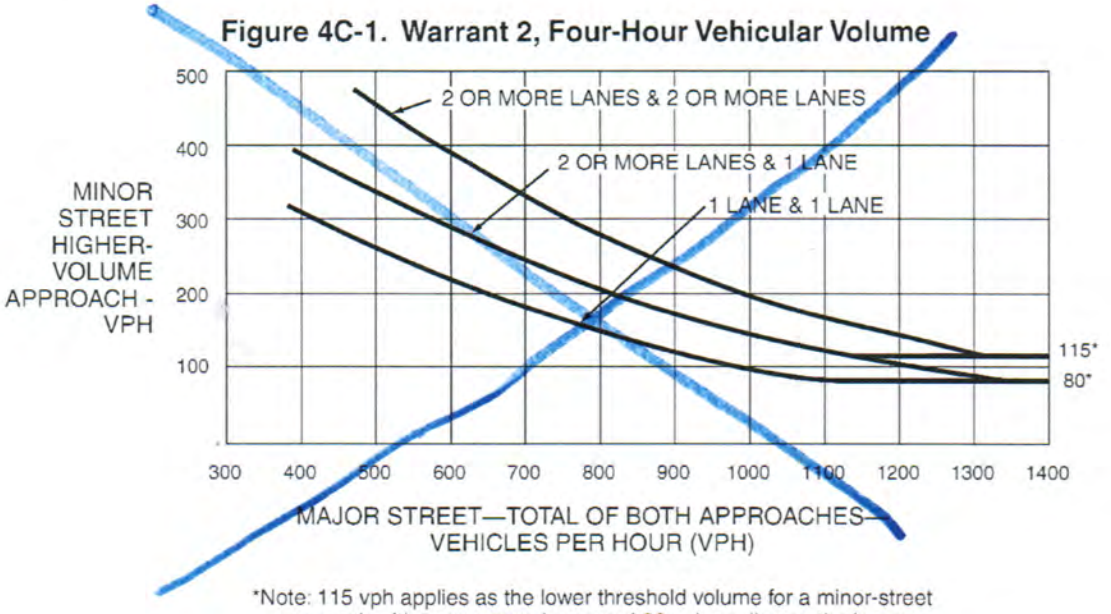
APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street			
Higher Approach - Minor Street			

NONE ABOVE LINE

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐ No ☒

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

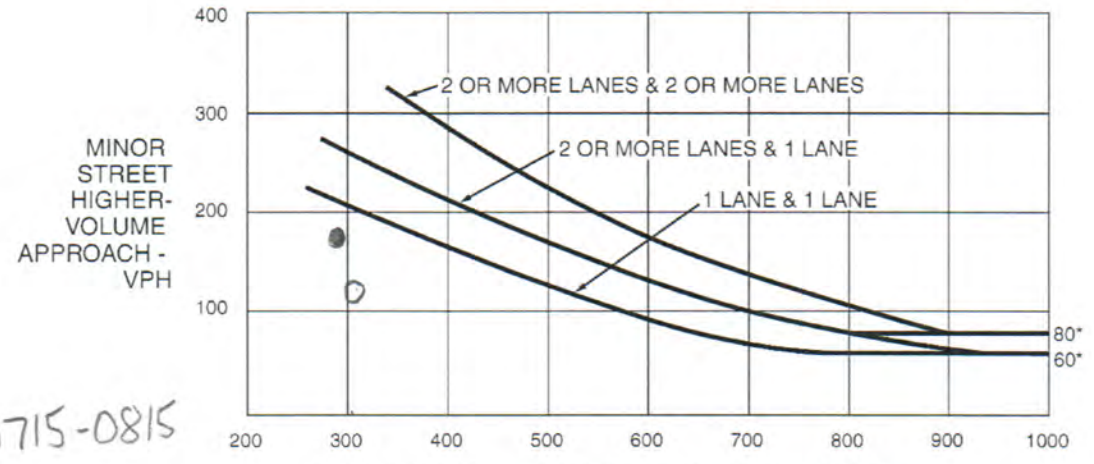
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

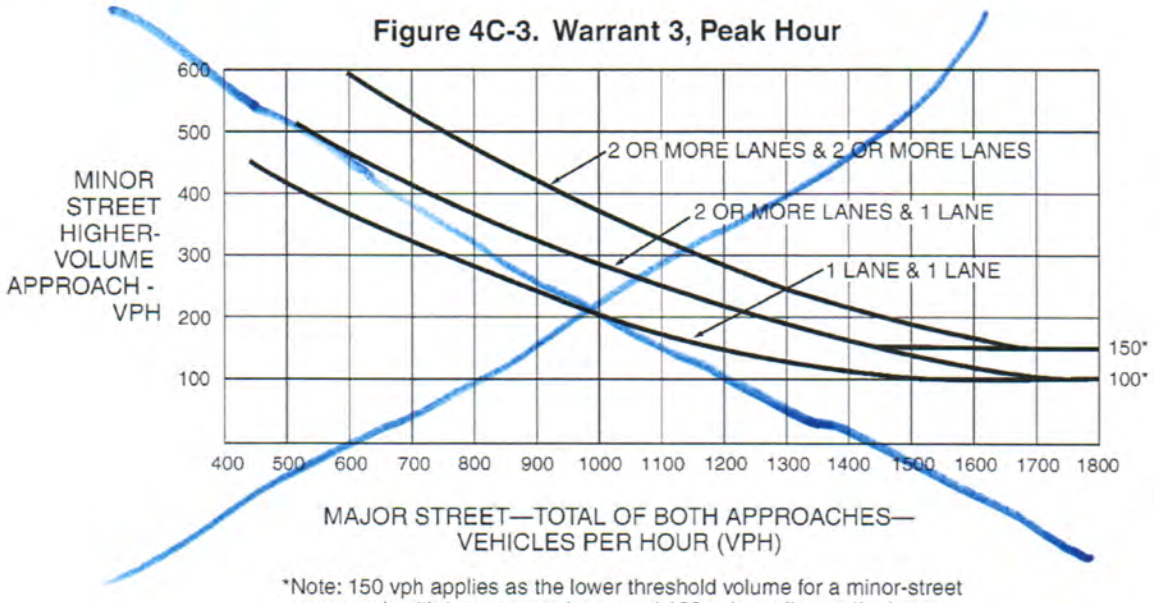


0715-0815

1515-1615

*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

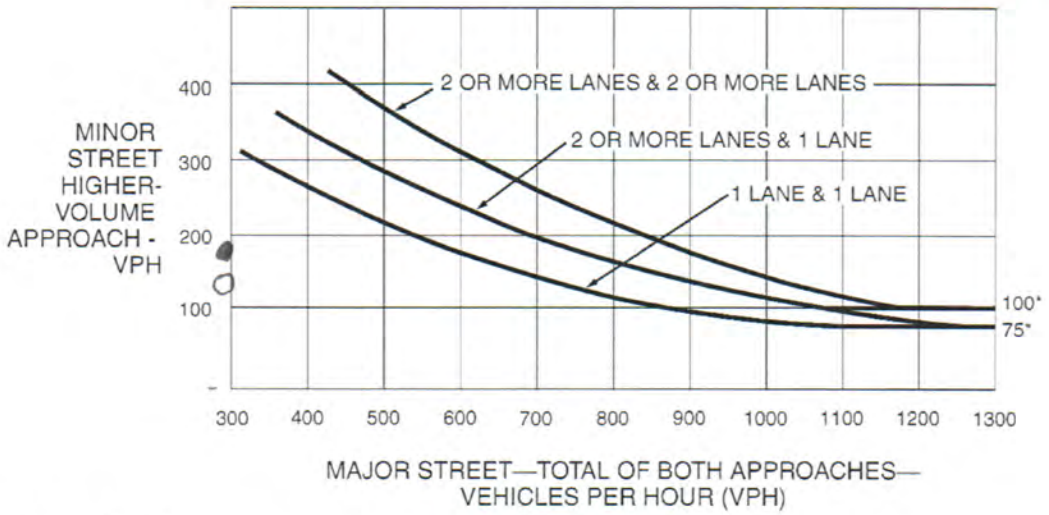
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

● 0715-0815

○ 1430-1530

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)

SATISFIED YES ☐ NO ☒

Part 1 (Parts A or B must be satisfied)

	Hours - - ->				
A.	Vehicles per hour for any 4 hours				
	Pedestrians per hour for any 4 hours				

Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☒

ZERO PEDS 7:00 - 9:00 AM & 4:00 - 6:00 PM

	Hours - - ->				
B.	Vehicles per hour for any 1 hour				
	Pedestrians per hour for any 1 hour				

Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☒

Part 2 **SATISFIED YES ☒ NO ☐**

AND, The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☒ No ☐
OR, The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes ☐ No ☐

WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)

SATISFIED YES ☐ NO ☒

Part A
Gap/Minutes and # of Children

SATISFIED YES ☐ NO ☒

		Hour ZERO PEDS
Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Gaps < Minutes YES ☐ NO ☐
AND Children > 20/hr YES ☐ NO ☐

AND, Consideration has been given to less restrictive remedial measures.	Yes ☐ No ☐

Part B **SATISFIED YES ☐ NO ☐**

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐ No ☐
OR, The proposed signal will not restrict the progressive movement of traffic.	Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

WARRANT 6 - Coordinated Signal System **SATISFIED YES ☐ NO ☐** N/A
(All Parts Must Be Satisfied)

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes ☐ No ☐
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes ☐ No ☐
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

WARRANT 7 - Crash Experience Warrant **SATISFIED YES ☐ NO ☒**
(All Parts Must Be Satisfied)

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.			Yes ☐ No ☐
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.		Yes ☐ No ☒
5 OR MORE	NO		
REQUIREMENTS	CONDITIONS	✓	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		Yes ☐ No ☒
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic		
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8		

WARRANT 8 - Roadway Network **SATISFIED YES ☐ NO ☒**
(All Parts Must Be Satisfied)

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour 541 Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes ☐ No ☒
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		

CHARACTERISTICS OF MAJOR ROUTES	MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic		
Rural or Suburban Highway Outside Of, Entering, or Traversing a City		
Appears as Major Route on an Official Plan		
Any Major Route Characteristics Met, Both Streets		Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

WARRANT 9 - Intersection Near a Grade Crossing **SATISFIED YES ☐ NO ☒**
(Both Parts A and B Must Be Satisfied)

PART A A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft	Yes ☐ No ☐
PART B **There is one minor street approach lane at the track crossing -** During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH	Yes ☐ No ☐
OR, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10. Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calcualte AF) = _____ VPH	

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

1- Number of Rail Traffic per Day_____ Adjustment factor from table 4C-2____

2- Percentage of High-Occupancy Buses on Minor Street Approach_____ Adjustment factor from table 4C-3____

3- Percentage of Tractor-Trailer Trucks on Minor Street Approach_____ Adjustment factor from table 4C-4____

NOTE: If no data is availale or known, then use AF = 1 (no adjustment)

	MINOR		MAJOR		NB+SB	EB or WB						
Period	EB	WB	NB	SB	Combined Major	Greatest Minor	Major >350?	Minor >105?	100% Satisfied?	Major >280?	Minor >84?	80% Satisfied?
00:00	4	1	0	0								
00:15	6	2	2	1								
00:30	1	1	0	2								
00:45	0	0	0	0	5	11	NO	NO		NO	NO	
01:00	0	1	0	2	7	7	NO	NO		NO	NO	
01:15	6	1	0	1	5	7	NO	NO		NO	NO	
01:30	11	1	0	1	4	17	NO	NO		NO	NO	
01:45	4	0	1	0	5	21	NO	NO		NO	NO	
02:00	3	3	1	0	4	24	NO	NO		NO	NO	
02:15	2	0	0	2	5	20	NO	NO		NO	NO	
02:30	0	1	0	1	5	9	NO	NO		NO	NO	
02:45	0	1	1	0	5	5	NO	NO		NO	NO	
03:00	2	2	0	0	4	4	NO	NO		NO	NO	
03:15	1	1	1	0	3	5	NO	NO		NO	NO	
03:30	0	3	2	0	4	7	NO	NO		NO	NO	
03:45	1	3	2	2	7	9	NO	NO		NO	NO	
04:00	3	3	0	1	8	10	NO	NO		NO	NO	
04:15	0	4	0	1	8	13	NO	NO		NO	NO	
04:30	3	5	2	1	9	15	NO	NO		NO	NO	
04:45	2	7	4	2	11	19	NO	NO		NO	NO	
05:00	2	12	2	2	14	28	NO	NO		NO	NO	
05:15	4	22	4	4	21	46	NO	NO		NO	NO	
05:30	7	32	10	3	31	73	NO	NO		NO	NO	
05:45	9	38	12	9	46	104	NO	NO		NO	YES	
06:00	20	22	18	9	69	114	NO	YES		NO	YES	
06:15	12	32	20	3	84	124	NO	YES		NO	YES	
06:30	8	32	28	6	105	124	NO	YES		NO	YES	
06:45	9	25	21	10	115	111	NO	YES		NO	YES	
07:00	8	27	27	11	126	116	NO	YES		NO	YES	
07:15	17	43	29	23	155	127	NO	YES		NO	YES	
07:30	17	60	39	48	208	155	NO	YES		NO	YES	
07:45	19	47	44	55	276	177	NO	YES		NO	YES	
08:00	18	25	27	30	295	175	NO	YES		YES	YES	YES
08:15	12	25	22	10	275	157	NO	YES		NO	YES	
08:30	11	28	16	11	215	125	NO	YES		NO	YES	
08:45	15	18	13	16	145	96	NO	NO		NO	YES	
09:00	13	33	15	21	124	104	NO	NO		NO	YES	
09:15	7	22	13	16	121	101	NO	NO		NO	YES	
09:30	10	17	14	15	123	90	NO	NO		NO	YES	
09:45	15	21	16	18	128	93	NO	NO		NO	YES	
10:00	15	21	21	20	133	81	NO	NO		NO	NO	
10:15	18	26	19	11	134	85	NO	NO		NO	YES	
10:30	10	21	12	17	134	89	NO	NO		NO	YES	
10:45	10	19	17	23	140	87	NO	NO		NO	YES	
11:00	12	15	15	17	131	81	NO	NO		NO	NO	
11:15	16	11	16	24	141	66	NO	NO		NO	NO	
11:30	15	23	19	10	141	68	NO	NO		NO	NO	
11:45	17	23	21	13	135	72	NO	NO		NO	NO	
12:00	14	14	14	27	144	71	NO	NO		NO	NO	
12:15	19	17	15	21	140	77	NO	NO		NO	NO	
12:30	11	16	18	17	146	70	NO	NO		NO	NO	
12:45	16	29	20	21	153	76	NO	NO		NO	NO	
13:00	19	21	15	16	143	83	NO	NO		NO	NO	
13:15	10	21	19	15	141	87	NO	NO		NO	YES	
13:30	10	25	17	20	143	96	NO	NO		NO	YES	
13:45	14	24	22	15	139	91	NO	NO		NO	YES	
14:00	32	19	22	33	163	89	NO	NO		NO	YES	
14:15	35	31	31	26	186	99	NO	NO		NO	YES	
14:30	40	19	22	29	200	121	NO	YES		NO	YES	
14:45	43	24	28	33	224	150	NO	YES		NO	YES	
15:00	30	39	34	31	234	148	NO	YES		NO	YES	
15:15	28	26	48	45	270	141	NO	YES		NO	YES	
15:30	24	34	40	31	290	125	NO	YES		YES	YES	YES
15:45	29	17	26	38	293	116	NO	YES		YES	YES	YES
16:00	28	24	44	31	303	109	NO	YES		YES	YES	YES
16:15	19	24	33	24	267	100	NO	NO		NO	YES	
16:30	23	32	25	38	259	99	NO	NO		NO	YES	
16:45	25	27	30	43	268	107	NO	YES		NO	YES	
17:00	32	19	34	39	266	102	NO	NO		NO	YES	
17:15	33	19	25	30	264	113	NO	YES		NO	YES	
17:30	34	14	18	30	249	124	NO	YES		NO	YES	
17:45	25	27	22	32	230	124	NO	YES		NO	YES	
18:00	29	20	22	44	223	121	NO	YES		NO	YES	
18:15	22	23	18	25	211	110	NO	YES		NO	YES	
18:30	23	22	15	21	199	99	NO	NO		NO	YES	
18:45	12	20	24	31	200	86	NO	NO		NO	YES	
19:00	19	14	17	20	171	79	NO	NO		NO	NO	
19:15	10	8	19	17	164	64	NO	NO		NO	NO	
19:30	20	7	10	17	155	61	NO	NO		NO	NO	
19:45	10	14	14	12	126	59	NO	NO		NO	NO	
20:00	9	8	22	9	120	49	NO	NO		NO	NO	
20:15	13	7	15	3	102	52	NO	NO		NO	NO	
20:30	9	7	12	5	92	41	NO	NO		NO	NO	
20:45	9	5	21	6	93	40	NO	NO		NO	NO	
21:00	10	3	5	9	76	41	NO	NO		NO	NO	
21:15	9	5	9	12	79	37	NO	NO		NO	NO	
21:30	6	12	8	5	75	34	NO	NO		NO	NO	
21:45	8	6	6	5	59	33	NO	NO		NO	NO	
22:00	3	7	3	7	55	30	NO	NO		NO	NO	
22:15	2	3	1	4	39	28	NO	NO		NO	NO	
22:30	2	2	2	8	36	18	NO	NO		NO	NO	
22:45	5	3	4	7	36	15	NO	NO		NO	NO	
23:00	1	0	1	3	30	10	NO	NO		NO	NO	
23:15	2	0	1	1	27	10	NO	NO		NO	NO	
23:30	3	0	1	0	18	11	NO	NO		NO	NO	
23:45	3	1	0	1	8	9	NO	NO		NO	NO	

	MINOR		MAJOR		NB+SB	EB or WB					
Period	EB	WB	NB	SB	Combined Major	Greatest Minor	Major >525?	Minor >53?	100% Satisfied?	Major >420?	Minor >42?	80% Satisfied?
00:00	4	1	0	0								
00:15	6	2	2	1								
00:30	1	1	0	2								
00:45	0	0	0	0	5	11	NO	NO		NO	NO	
01:00	0	1	0	2	7	7	NO	NO		NO	NO	
01:15	6	1	0	1	5	7	NO	NO		NO	NO	
01:30	11	1	0	1	4	17	NO	NO		NO	NO	
01:45	4	0	1	0	5	21	NO	NO		NO	NO	
02:00	3	3	1	0	4	24	NO	NO		NO	NO	
02:15	2	0	0	2	5	20	NO	NO		NO	NO	
02:30	0	1	0	1	5	9	NO	NO		NO	NO	
02:45	0	1	1	0	5	5	NO	NO		NO	NO	
03:00	2	2	0	0	4	4	NO	NO		NO	NO	
03:15	1	1	1	0	3	5	NO	NO		NO	NO	
03:30	0	3	2	0	4	7	NO	NO		NO	NO	
03:45	1	3	2	2	7	9	NO	NO		NO	NO	
04:00	3	3	0	1	8	10	NO	NO		NO	NO	
04:15	0	4	0	1	8	13	NO	NO		NO	NO	
04:30	3	5	2	1	9	15	NO	NO		NO	NO	
04:45	2	7	4	2	11	19	NO	NO		NO	NO	
05:00	2	12	2	2	14	28	NO	NO		NO	NO	
05:15	4	22	4	4	21	46	NO	NO		NO	YES	
05:30	7	32	10	3	31	73	NO	YES		NO	YES	
05:45	9	38	12	9	46	104	NO	YES		NO	YES	
06:00	20	22	18	9	69	114	NO	YES		NO	YES	
06:15	12	32	20	3	84	124	NO	YES		NO	YES	
06:30	8	32	28	6	105	124	NO	YES		NO	YES	
06:45	9	25	21	10	115	111	NO	YES		NO	YES	
07:00	8	27	27	11	126	116	NO	YES		NO	YES	
07:15	17	43	29	23	155	127	NO	YES		NO	YES	
07:30	17	60	39	48	208	155	NO	YES		NO	YES	
07:45	19	47	44	55	276	177	NO	YES		NO	YES	
08:00	18	25	27	30	295	175	NO	YES		NO	YES	
08:15	12	25	22	10	275	157	NO	YES		NO	YES	
08:30	11	28	16	11	215	125	NO	YES		NO	YES	
08:45	15	18	13	16	145	96	NO	YES		NO	YES	
09:00	13	33	15	21	124	104	NO	YES		NO	YES	
09:15	7	22	13	16	121	101	NO	YES		NO	YES	
09:30	10	17	14	15	123	90	NO	YES		NO	YES	
09:45	15	21	16	18	128	93	NO	YES		NO	YES	
10:00	15	21	21	20	133	81	NO	YES		NO	YES	
10:15	18	26	19	11	134	85	NO	YES		NO	YES	
10:30	10	21	12	17	134	89	NO	YES		NO	YES	
10:45	10	19	17	23	140	87	NO	YES		NO	YES	
11:00	12	15	15	17	131	81	NO	YES		NO	YES	
11:15	16	11	16	24	141	66	NO	YES		NO	YES	
11:30	15	23	19	10	141	68	NO	YES		NO	YES	
11:45	17	23	21	13	135	72	NO	YES		NO	YES	
12:00	14	14	14	27	144	71	NO	YES		NO	YES	
12:15	19	17	15	21	140	77	NO	YES		NO	YES	
12:30	11	16	18	17	146	70	NO	YES		NO	YES	
12:45	16	29	20	21	153	76	NO	YES		NO	YES	
13:00	19	21	15	16	143	83	NO	YES		NO	YES	
13:15	10	21	19	15	141	87	NO	YES		NO	YES	
13:30	10	25	17	20	143	96	NO	YES		NO	YES	
13:45	14	24	22	15	139	91	NO	YES		NO	YES	
14:00	32	19	22	33	163	89	NO	YES		NO	YES	
14:15	35	31	31	26	186	99	NO	YES		NO	YES	
14:30	40	19	22	29	200	121	NO	YES		NO	YES	
14:45	43	24	28	33	224	150	NO	YES		NO	YES	
15:00	30	39	34	31	234	148	NO	YES		NO	YES	
15:15	28	26	48	45	270	141	NO	YES		NO	YES	
15:30	24	34	40	31	290	125	NO	YES		NO	YES	
15:45	29	17	26	38	293	116	NO	YES		NO	YES	
16:00	28	24	44	31	303	109	NO	YES		NO	YES	
16:15	19	24	33	24	267	100	NO	YES		NO	YES	
16:30	23	32	25	38	259	99	NO	YES		NO	YES	
16:45	25	27	30	43	268	107	NO	YES		NO	YES	
17:00	32	19	34	39	266	102	NO	YES		NO	YES	
17:15	33	19	25	30	264	113	NO	YES		NO	YES	
17:30	34	14	18	30	249	124	NO	YES		NO	YES	
17:45	25	27	22	32	230	124	NO	YES		NO	YES	
18:00	29	20	22	44	223	121	NO	YES		NO	YES	
18:15	22	23	18	25	211	110	NO	YES		NO	YES	
18:30	23	22	15	21	199	99	NO	YES		NO	YES	
18:45	12	20	24	31	200	86	NO	YES		NO	YES	
19:00	19	14	17	20	171	79	NO	YES		NO	YES	
19:15	10	8	19	17	164	64	NO	YES		NO	YES	
19:30	20	7	10	17	155	61	NO	YES		NO	YES	
19:45	10	14	14	12	126	59	NO	YES		NO	YES	
20:00	9	8	22	9	120	49	NO	NO		NO	YES	
20:15	13	7	15	3	102	52	NO	NO		NO	YES	
20:30	9	7	12	5	92	41	NO	NO		NO	NO	
20:45	9	5	21	6	93	40	NO	NO		NO	NO	
21:00	10	3	5	9	76	41	NO	NO		NO	NO	
21:15	9	5	9	12	79	37	NO	NO		NO	NO	
21:30	6	12	8	5	75	34	NO	NO		NO	NO	
21:45	8	6	6	5	59	33	NO	NO		NO	NO	
22:00	3	7	3	7	55	30	NO	NO		NO	NO	
22:15	2	3	1	4	39	28	NO	NO		NO	NO	
22:30	2	2	2	8	36	18	NO	NO		NO	NO	
22:45	5	3	4	7	36	15	NO	NO		NO	NO	
23:00	1	0	1	3	30	10	NO	NO		NO	NO	
23:15	2	0	1	1	27	10	NO	NO		NO	NO	
23:30	3	0	1	0	18	11	NO	NO		NO	NO	
23:45	3	1	0	1	8	9	NO	NO		NO	NO	

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **0** *Direction* *Secondary Rd* **CENTRAL AVE.** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **017088** *Collision Date* **20180215** *Time* **1215** *Day* **THU**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152F** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **3** *Tow Away?* **Y** *Process Date* **20180228**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip								
1F	DRVR	23	M	H		DRUG	PROC ST	E	A	0100	HONDA	2000	-	3	A	22450	- L G	DRVR	POSSIBL	23	M	1	0	L	G
2	DRVR	64	M	H	HNBD		PROC ST	N	D	2200	FORD	2010	-	3	N		- L G	DRVR	MINOR	64	M	1	0	L	G
																		PASS	POSSIBL	63	F	3	0	L	G

Victim Info

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **0** *Direction* *Secondary Rd* **GOODFELLOW** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016507** *Collision Date* **20180503** *Time* **2108** *Day* **THU**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20180511**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip								
1F	DRVR	21	F	H	HNBD		UNS TURN	N	A	0700	CHEV	2004	-	3	N		- M G								
2	DRVR	24	M	H	HNBD		PROC ST	W	A	0100	STRN	2004	-	3	N		- M G	DRVR	POSSIBL	24	M	1	0	M	G

Victim Info

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **301** *Direction* **N** *Secondary Rd* **LINCOLN AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016270** *Collision Date* **20181219** *Time* **2054** *Day* **WED**
Primary Collision Factor **UNKNOWN** *Violation* *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20190228**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	62	M	H	HNBD		LFT TURN	S	A	0100	NISS	2015	-	3	N		- L G
2	DRVR	29	F	W	HNBD		PROC ST	S	A	0100	AUDI	2007	-	3	N		- L G

Victim Info

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety	Equip	Ejected

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **5808** *Direction* **S** *Secondary Rd* **PIEDRA RD** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **020837** *Collision Date* **20181013** *Time* **2225** *Day* **SAT**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20181019**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip								
1F	DRVR	25	M	H	HBD-UI		UNS TURN	S	A	0100	TOYT	1997	-	3	A	22107	- L G	DRVR	SERIOUS	25	M	1	0	L	G

Victim Info

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **1584** *Direction* **S** *Secondary Rd* **SOUTH AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016270** *Collision Date* **20180929** *Time* **2351** *Day* **SAT**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20181004**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	17	F	W	HNBD		UNS TURN	N	D	2200	CHEV	2003	-	3	N		- L G

Victim Info

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety	Equip	Ejected

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **SOUTH AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016507** *Collision Date* **20190721** *Time* **1320** *Day* **SUN**
Primary Collision Factor **STOP SGN|SIG** *Violation* **22450A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **3** *Tow Away?* **Y** *Process Date* **20190730**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	45	M	H	HNBD		PROC ST	S	D	2200	TOYT	2010	-	3	N		-	L	G
2	DRVR	68	F	H	HNBD		PROC ST	W	D	2200	CHEV	2015	-	3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	45	M	1	0	L	G
PASS	POSSIBL	82	F	3	0	L	G
DRVR	MINOR	68	F	1	0	L	G

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **1900** *Direction* **S** *Secondary Rd* **SR-180** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **020429** *Collision Date* **20190925** *Time* **2145** *Day* **WED**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20191001**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	29	F	W	IMP UNK	IMP UNK	UNS TURN	S	A	0100	CHEV	1997	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **130.** *Direction* **N** *Secondary Rd* **SUMNER AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016270** *Collision Date* **20190518** *Time* **1455** *Day* **SAT**
Primary Collision Factor **NOT DRIVER** *Violation* *Collision Type* **OTHER** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20190522**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **ANIMAL** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	23	F	H	HNBD		PROC ST	S	A	0100	HOND	2009	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FRANKWOOD AVENUE** *Distance (ft)* **350.** *Direction* **S** *Secondary Rd* **ERIKSEN AVENUE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **020078** *Collision Date* **20191220** *Time* **1728** *Day* **FRI**
Primary Collision Factor **WRONG SIDE** *Violation* **21650** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **Y** *Process Date* **20191227**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	85	M	W	HNBD		WRONG WY	N	A	0100	TOYO	1998	-	3	N		-	M	G
2	DRVR	49	M	H	HNBD		PROC ST	S	A	0100	HONDA	2000	-	3	N		-	L	G
3	DRVR	39	M	W	HNBD		PROC ST	N	D	2200	CHEV	2018	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	49	M	1	0	L	G
DRVR	POSSIBL	39	M	1	0	M	G

Primary Rd **FRANKWOOD AVENUE** *Distance (ft)* **7392** *Direction* **N** *Secondary Rd* **SR-180** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **020540** *Collision Date* **20190220** *Time* **2350** *Day* **WED**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **OVERTURNED** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20190228**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	60	M	W	HBD-UI		PROC ST	N	D	2200	CHEV	2008	-	3	A	22107	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FRANKWOOD AV** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **NORTH AV** *NCIC* **1012** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Reedley** *County* **Fresno** *Population* **3** *Rpt Dist* **REEDL** *Beat* *Type* **0** *CalTrans* *Badge* **L059** *Collision Date* **20220420** *Time* **1454** *Day* **WED**
Primary Collision Factor **R-O-W PED** *Violation* **21950A** *Collision Type* **AUTO/PED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20220613**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PED** *Lighting* **DAYLIGHT** *Ped Action* **X-WLK AT** *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	PED	13	M	H	HNBD		PROC ST	E	N	6000	-		-	3	N		-	-	-
2F	DRVR	36	F	H	HNBD		PROC ST	N	A	0100	-	2021	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	OTH VIS	13	M	-	-	-	-

Primary Rd **FRANKWOOD AV** *Distance (ft)* **100.** *Direction* **S** *Secondary Rd* **SOUTH AV** *NCIC* **1012** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Reedley** *County* **Fresno** *Population* **3** *Rpt Dist* **REEDL** *Beat* *Type* **0** *CalTrans* *Badge* **L134** *Collision Date* **20220610** *Time* **2202** *Day* **FRI**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20220823**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	37	M		HBD-UI		PROC ST	S	A	0100	-	2014	-	-	A	22450	-	M	B
2	DRVR	36	F	W	HNBD		PROC ST	S	A	0100	-	2019	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		40	F	3	0	M	G

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **60.0** *Direction* **N** *Secondary Rd* **CENTRAL AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016507** *Collision Date* **20221106** *Time* **1725** *Day* **SUN**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20221114**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **MV ON OTHER RD** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	51	M	H	HNBD		PROC ST	S	A	0700	TOYT	2000	-	3	N		-	M	G
2F	DRVR	998	M	H	IMP UNK	IMP UNK	UNS TURN	N	A	0100	CHEV	2008	-	4	N		-	M	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **528.** *Direction* **S** *Secondary Rd* **JEFFERSON AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016507** *Collision Date* **20220417** *Time* **1135** *Day* **SUN**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **Y** *Process Date* **20220426**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	79	F	W	HNBD		U-TURN	N	A	0700	LEXS	2015	-	3	N		-	M	G
2	DRVR	24	M	H	HNBD		PROC ST	N	A	0100	FORD	2015	-	3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	79	F	1	0	M	G
DRVR	POSSIBL	24	M	1	0	L	G

Primary Rd **FRANKWOOD AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **LINCOLN AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **016507** *Collision Date* **20220425** *Time* **1900** *Day* **MON**
Primary Collision Factor **WRONG SIDE** *Violation* **21460B** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220502**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	21	M	H	HNBD		PASSING	N	A	0100	DODG	2015	-	3	N		-	M	G
2	DRVR	42	F	W	HNBD		LFT TURN	N	A	0100	FORD	2000	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FRANKWOOD AVENUE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **LINCOLN AVENUE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **020540** *Collision Date* **20221201** *Time* **1330** *Day* **THU**
Primary Collision Factor **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **3** *Tow Away?* **Y** *Process Date* **20221205**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	25	F	H	HNBD		PROC ST	E	A	0100	HOND	2017	-	3	N	-	L	G
2	DRVR	51	M	H	HNBD		PROC ST	N	A	0100	HOND	2005	-	3	N	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	25	F	1	0	L	G
PASS	SERIOUS	54	F	3	0	L	G
PASS	MINOR	49	F	6	0	L	G

Primary Rd **FRANKWOOD AVENUE** *Distance (ft)* **24.0** *Direction* **N** *Secondary Rd* **SOUTH AVENUE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **060** *Type* **3** *CalTrans* *Badge* **020540** *Collision Date* **20220702** *Time* **2330** *Day* **SAT**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20220713**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	30	F	H	HBD-UI		PROC ST	S	A	0100	CHEV	2015	-	3	A	22350	-	L	G
2	DRVR	62	M	H	HNBD		SLOWING	S	D	2200	CHEV	2017	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FRAZIER ROAD** *Distance (ft)* **5.00** *Direction* **W** *Secondary Rd* **SPREADING OAK** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **050** *Type* **3** *CalTrans* *Badge* **019263** *Collision Date* **20220103** *Time* **0155** *Day* **MON**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **OVERTURNED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20220111**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **NON-CLSN** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	61	M	W	HNBD		RAN OFF RD	E	C	0200	SUZI	2007	-	3	N	-	-	W

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	SERIOUS	62	M	1	1	P	W

Primary Rd **FRAZIER ROAD** *Distance (ft)* **528.** *Direction* **W** *Secondary Rd* **SPREADING OAK** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **050** *Type* **3** *CalTrans* *Badge* **019263** *Collision Date* **20220227** *Time* **1910** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20220307**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	25	F	W	HBD-UNK		PROC ST	E	A	0700	HYUN	2004	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FREMONT AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ANGUS ST** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **NE** *Beat* **00C** *Type* **0** *CalTrans* *Badge* **P1117** *Collision Date* **20220216** *Time* **1036** *Day* **WED**
Primary Collision Factor **WRONG SIDE** *Violation* **21650** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220223**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	40	M	W	HNBD		U-TURN	E	D	2200	GMC	2015	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

APPENDIX F

FLORIDA TABLES

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

(C3C-Suburban Commercial)

Peak Hour Directional

	B	C	D	E
1 Lane	*	760	1,070	**
2 Lane	*	1,520	1,810	**
3 Lane	*	2,360	2,680	**
4 Lane	*	3,170	3,180	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,380	1,950	**
4 Lane	*	2,760	3,290	**
6 Lane	*	4,290	4,870	**
8 Lane	*	5,760	5,780	**

AADT

	B	C	D	E
2 Lane	*	15,300	21,700	**
4 Lane	*	30,700	36,600	**
6 Lane	*	47,700	54,100	**
8 Lane	*	64,000	64,200	**

(C3R-Suburban Residential)

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

Adjustment Factors

The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities
The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80
Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.
* Cannot be achieved using table input value defaults.
** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

Input Parameters

Roadway Characteristics

	C3C	C3R
Number of Lanes (one direction)	1-4	1-3
Posted Speed (mph)	45	45
Facility Length (miles)	3.98	2.57

Traffic Characteristics

	C3C		C3R	
Planning Analysis Hour Factor (K)	0.09		0.09	
Directional Distribution Factor (D)	0.55		0.55	
Peak Hour Factor (PHF)	0.95		0.92	
Base Saturation Flow Rate	1,950		1,950	
Heavy Vehicle Percent (%)	4		4	
Lane Width	12		12	
Median Type	Non Restrictive (1 lane)	Restrictive (2,3,4 lanes)	Non Restrictive (1 lane)	Restrictive (2,3 lanes)
Roadway Edge Type	Curbed		Flush	
On-Street Parking	None		None	

Control Characteristics

	C3C		C3R
Cycle Length	160		190
Major Street Through g/c	0.5 (1,2,3 lanes)	0.45 (4 lanes)	0.5
Yellow Change Interval	5.1		5.1
Red Change Interval	2		2
Number of Signals	10		5

Appendix F

Environmental Assessment

CITY OF REEDLEY

NOTICE OF INTENT TO ADOPT A FINDING OF A MITIGATED NEGATIVE DECLARATION

Environmental Assessment (EA) No. 2022-12
Frankwood Commons Commercial Village
SPR 2022-01, TPM 2022-02

FILED WITH:

FRESNO COUNTY CLERK
2220 Tulare Street, 1st Floor
Fresno, California 93721-2600

LEAD AGENCY:

City of Reedley
Community Development Department
1733 Ninth Street
Reedley, CA 93654
Contact: Ellen Moore, City Planner
e-mail: ellen.moore@reedley.ca.gov
Phone: (559) 637-4200 x 222

APPLICANT:

S-K Ranch Management,
Shannon Family
Contact Person: JR Shannon
11878 Avenue 328
Visalia, CA 93291
(559) 401-2622

PROJECT LOCATION:
Located within the northern portion of the City of Reedley, the proposed Project Site is on the northeast corner of South Frankwood Avenue and East South Avenue. The Site is topographically flat and is bordered by agricultural land uses to the west and south, and single-family homes to the north, east, and southeast. The Project Site is approximately 4.19 gross acres and is on APN 363-220-041.

PROJECT DESCRIPTION: The proposed Project involves the development of a commercial development Project on approximately 4.19 acres in the City of Reedley. The proposed Project includes a gas station/convenience store with a drive-through and a medical clinic. The gas station/convenience store will be approximately 5,200 square feet, while the medical clinic will be approximately 11,000 square feet. The existing and proposed zoning is CN, Neighborhood Commercial. The 2030 Reedley General Plan designates the Site as Neighborhood Commercial. The proposed land use is Neighborhood Commercial. The Project would subdivide the 4.19-acre Site into two parcels, one for each business. The Site will include 100 parking stalls and construct on-site and off-Site infrastructure improvements. These streets have already been improved by the development of surrounding homes, including new and relocated utilities. The eastern half of Frankwood Avenue was expanded from a 30' ROW to a 42' ROW and has been built out to include a bike lane, sidewalk, landscaping, and lighting. The northern half of South Avenue was expanded from a 30' ROW to a 53' ROW, including a bike lane, sidewalks, landscaping, and lighting. Construction is proposed to begin in January 2024 and will last approximately 13 months. The Project is currently under review by the City of Reedley under Site Plan Review Application No. 2022-1 and Tentative Parcel Map Application 2022-2.

SUMMARY OF FINDINGS: The City of Reedley has conducted an environmental analysis for the above-described project. The project has been determined to be a subsequent project that is not fully within the scope of the certified Program Environmental Impact Report (SCH No. 2010031106) prepared for the Reedley General Plan 2030 Update (GPU). Therefore, the City of Reedley, as the lead agency, proposes to adopt a Mitigated Negative Declaration for this project.

The completed environmental impact checklist, its associated narrative, and any proposed mitigation measure(s) reflect applicable comments of responsible and trustee agencies, as well as research and analysis

conducted to examine the interrelationship between the proposed project and the physical environment. The information contained in the project application and its related environmental assessment application, responses to requests for comment, checklist and initial study narrative combine to form the record indicating that an initial study has been completed in compliance with the California Environmental Quality Act and the CEQA Guidelines.

All new development activity and many non-physical projects contribute directly or indirectly toward cumulative impacts on the physical environment. It has been determined that the incremental effect contributed by this project toward cumulative impacts is not considered substantial or significant in itself, and/or that cumulative impacts accruing from this project may be mitigated to less than significant with application of feasible mitigation measures.

For some categories of potential impacts, the checklist may indicate that a specific adverse environmental effect has been identified which is of sufficient magnitude to potentially be of concern without mitigation to reduce the level of significance. Such an effect may be inherent in nature and magnitude of the project. The completed environmental checklist form indicated whether an impact would be less than significant, or less than significant with mitigation. Effects so rated are not sufficient in themselves to require the preparation of an Environmental Impact Report, and have been mitigated to the extent reasonably feasible as required by CEQA.

The project is not located on a site which is included on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to, lists of hazardous waste facilities, land designated as hazardous waste property, hazardous waste disposal sites and others, and the information in the Hazardous Waste and Substance Statement required under subdivision (f) of that Section.

The initial study has concluded that the proposed project would not result in any adverse effects which fall within the “Mandatory Findings of Significance” contained in Section 15065 of the State CEQA Guidelines.

With the project specific mitigation imposed, there is no substantial evidence in the record that this project may have additional significant direct, indirect or cumulative effects on the environment that are significant and that were not identified and analyzed in the certified Program Environmental Impact Report prepared for the Reedley General Plan Update 2030. After conducting a review of the adequacy of the Program Environmental Impact Report (SCH No. 2010031106) pursuant to Public Resources Code Section 21083.3, and CEQA Guidelines Sections 15168, as the lead agency, finds that no substantial changes have occurred with respect to circumstances under which the Program Environmental Impact Report (SCH No. 2010031106) was certified, and that no new information which was not known and could not have been know at the time that the Program Environmental Impact Report (SCH No. 2010031106) was certified, has become available.

Additional information on the proposed project, including a copy of the proposed environmental findings, may be obtained from the City of Reedley, Community Development Department, City Hall, 1733 Ninth Street, Reedley, California 93654 during normal business hours (Monday-Friday, 8 AM – 5 PM).

Electronic copies can be obtained by e-mailing ellen.moore@reedley.ca.gov or by visiting the City of Reedley website at the following link: https://reedley.ca.gov/community-development-department/ceqa-environmental-assessments/

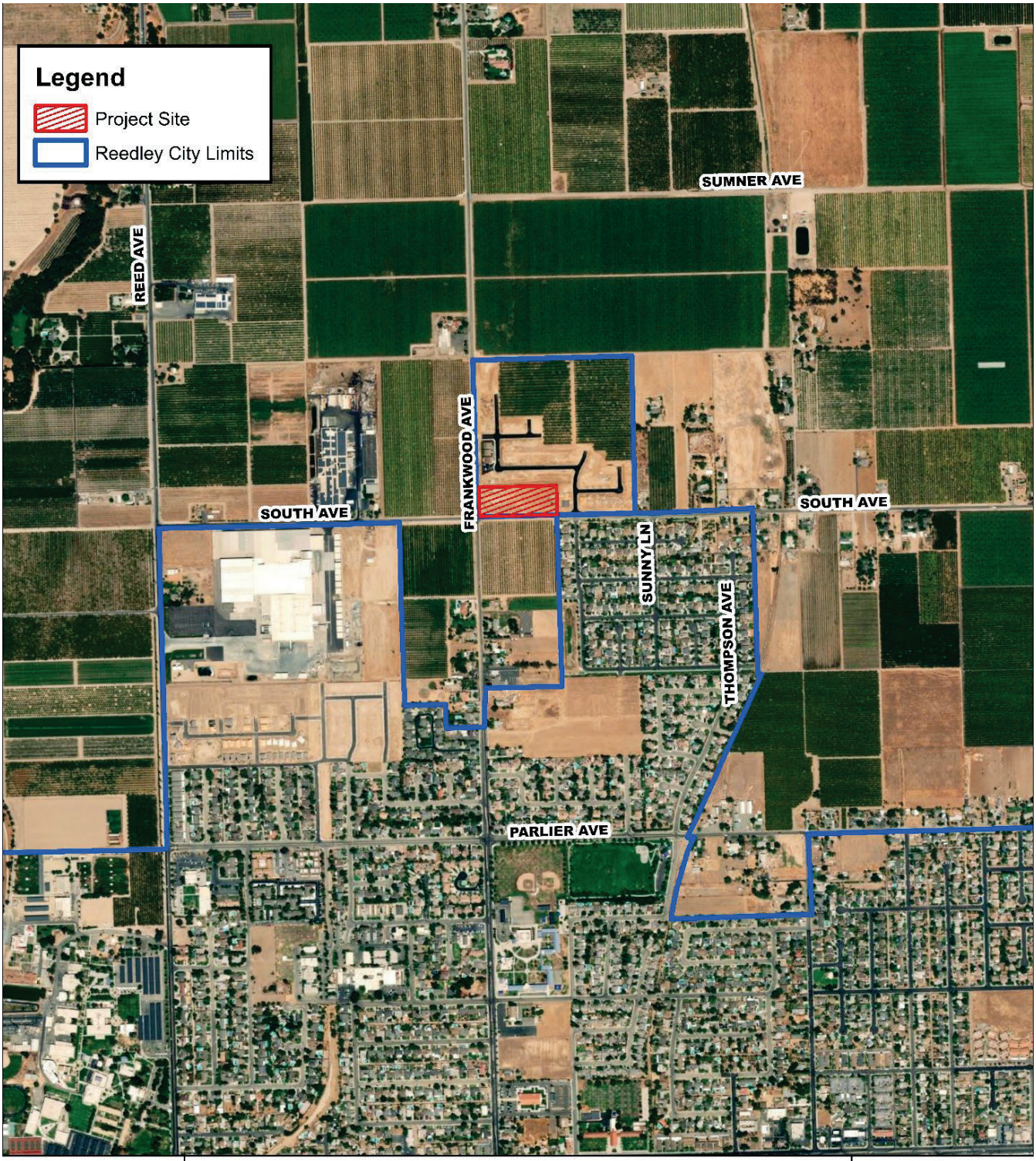
ANY INTERESTED PERSON may comment on the proposed environmental finding. Comments may be submitted at any time between the date of this notice and close of business on October 9, 2023. Please direct comments to Ellen Moore, City Planner in the Community Development Department at City Hall, 1733 Ninth Street, Reedley, California 93654, or phone: 559-637-4200, Ext. 222, or e-mail ellen.moore@reedley.ca.gov.

Environmental Assessment No. 2022-12 (EA 2022-12), Site Plan Review Application No. 2022-01 (SPR 2022-01) and Tentative Parcel Map Application No. 2022-02 (TPM 2022-02) are scheduled to be considered by the City of Reedley Planning Commission on November 2, 2023. The Commission meeting will be held at 5:00 p.m., in the Council Chambers at Reedley City Hall, located at 845 G Street, Reedley, California 96354.

INITIAL STUDY PREPARED BY: Ellen Moore, City Planner	SUBMITTED BY:  Ellen Moore, City Planner Community Development Department CITY OF REEDLEY
DATE: September 7, 2023	

Attachments: Location Map
Site Plan Review Application No. 2022-01
Tentative Parcel Map Application No. 2022-02

Location Map



4CREEKS

Regional Location Map

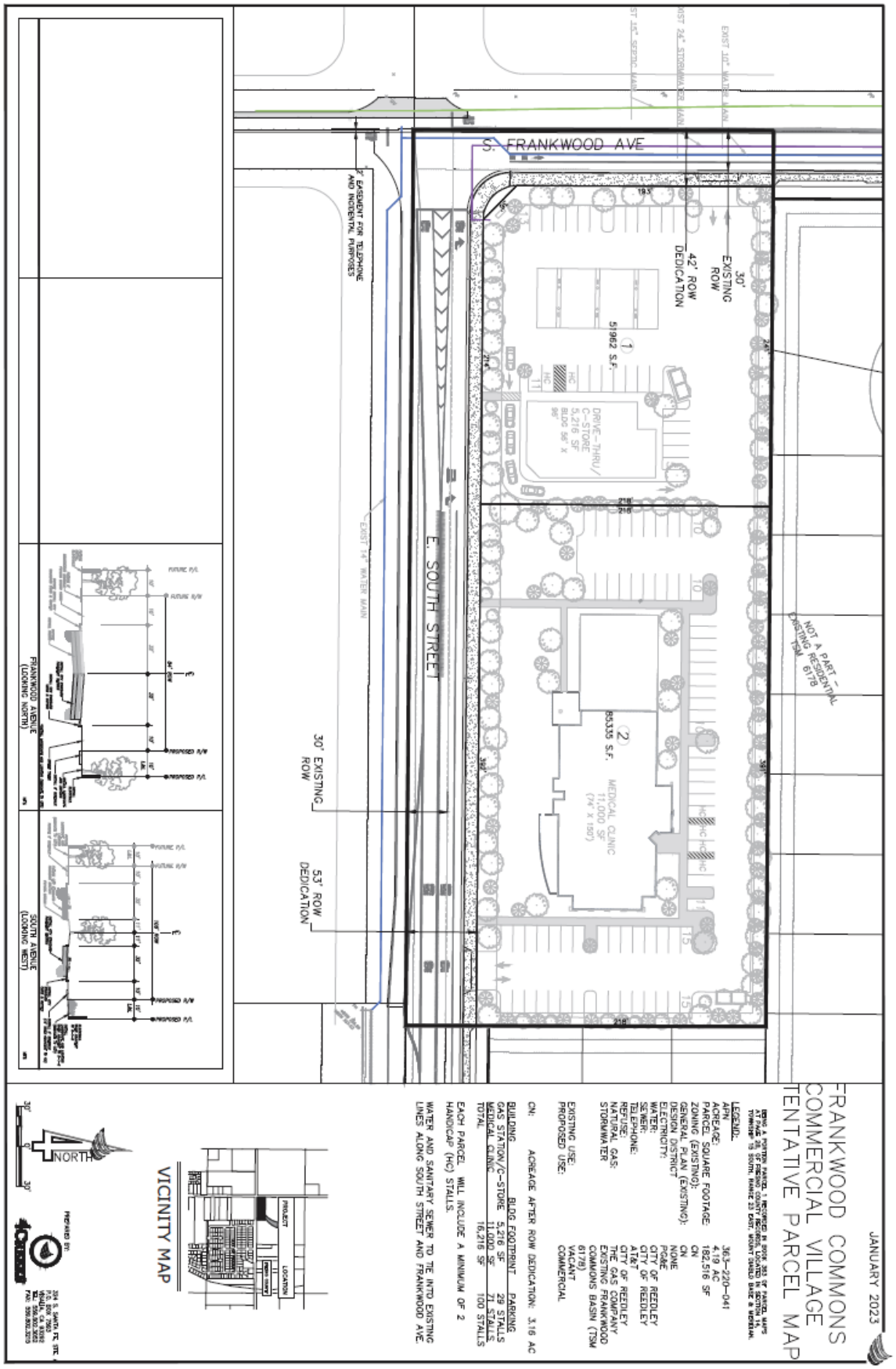
Frankwood Commons

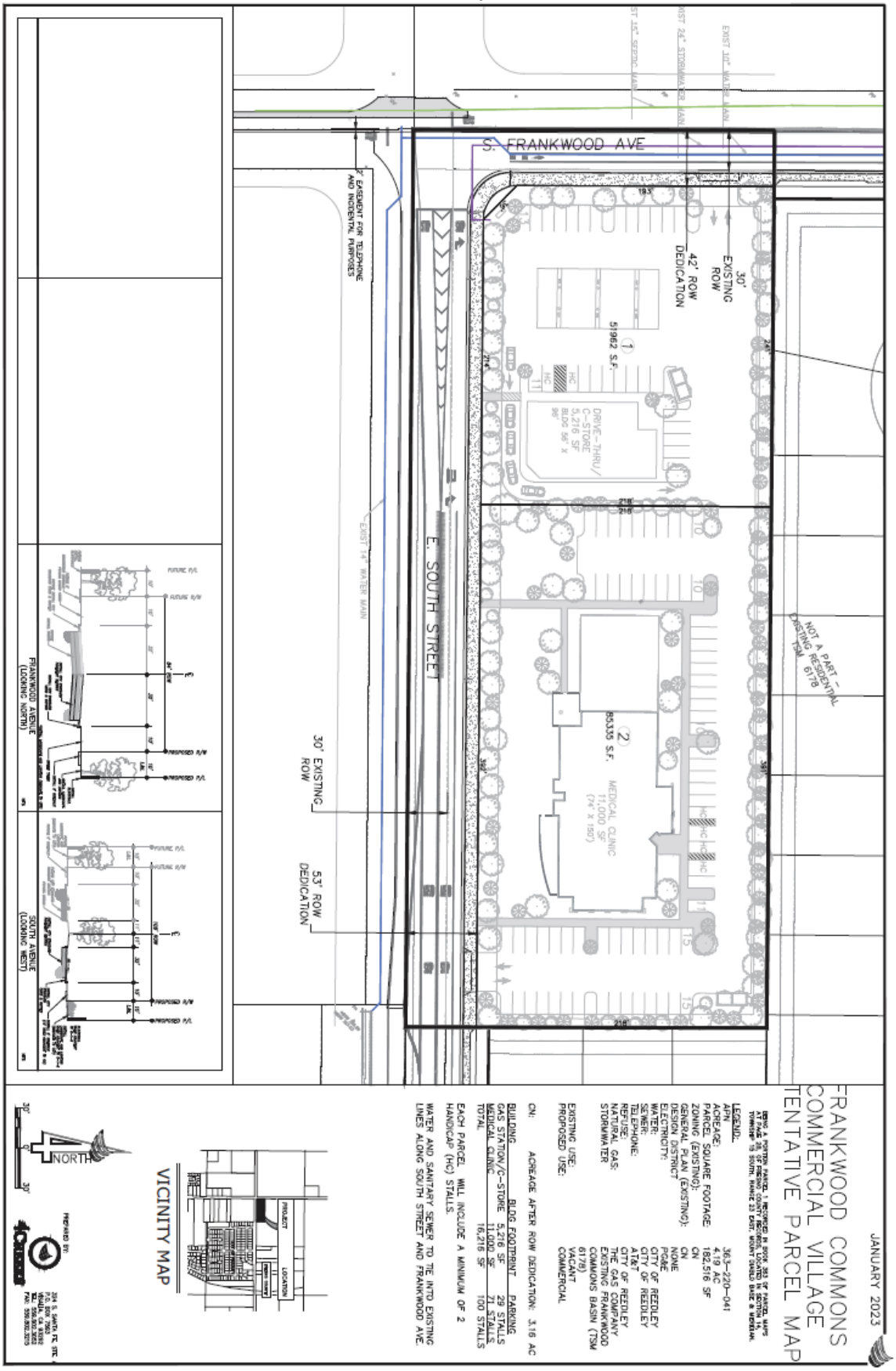
City of Reedley

Date: 1/16/2023

N

1 inch = 1,000 feet


FRANKWOOD COMMONS
COMMERCIAL VILLAGE
TENTATIVE PARCEL MAP
JANUARY 2023
S. FRANKWOOD AVE
E. SOUTH STREET
30' EXISTING ROW
42' ROW DEDICATION
53' ROW DEDICATION
51962 S.F.
85335 S.F.
MEDICAL CLINIC
11,000 SF
(74' X 150')
DRIVE-THRU C-STORE
3,216 SF
BLDG 56' X 80'
NOT A PART - EXISTING RESIDENTIAL TSM 6178
EXIST 24" STORM DRAIN
EXIST 14" WATER MAIN
EXIST 8" SEWER MAIN
EXIST 10" WATER MAIN
5' EASEMENT FOR TELEPHONE AND INCIDENTAL PURPOSES
FRANKWOOD AVENUE
(LOOKING NORTH)
SOUTH AVENUE
(LOOKING WEST)
VICINITY MAP
PROJECT LOCATION
NORTH
PREPARED BY:
LEGEND:
APN: 363-220-041
ACREAGE: 4.19 AC
PARCEL SQUARE FOOTAGE: 182,516 SF
ZONING (EXISTING): CN
GENERAL PLAN (EXISTING): CN
ELEVATION DISTRICT: I
WATER: PRIVATE
SEWER: CITY OF REEDLEY
TELEPHONE: AT&T
REFUSE: CITY OF REEDLEY
NATURAL GAS: THE GAS COMPANY
STORMWATER: EXISTING FRANKWOOD COMMONS BASIN (TSM 6178)
EXISTING USE: VACANT
PROPOSED USE: COMMERCIAL
CN: ACREAGE AFTER ROW DEDICATION: 3.16 AC
BUILDING BLDG FOOTPRINT PARKING
GAS STATION/C-STORE 5,216 SF 29 STALLS
MEDICAL CLINIC 11,000 SF 71 STALLS
TOTAL 16,216 SF 100 STALLS
EACH PARCEL WILL INCLUDE A MINIMUM OF 2 HANDICAP (HC) STALLS.
WATER AND SANITARY SEWER TO TIE INTO EXISTING LINES ALONG SOUTH STREET AND FRANKWOOD AVE.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FRANKWOOD AVENUE (LOOKING NORTH)
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VICINITY MAP
PROJECT LOCATION
NORTH
LEGEND:
APN:
ACREAGE:
PARCEL SQUARE FOOTAGE:
ZONING (EXISTING):
GENERAL PLAN (EXISTING):
DESIGN DISTRICT:
ELECTRICITY:
WATER:
SEWER:
TELEPHONE:
REFUSE:
NATURAL GAS:
STORMWATER
EXISTING USE:
PROPOSED USE:
363-220-041
4.19 AC
182,516 SF
CN
CN
NONE
PG&E
CITY OF REEDLEY
CITY OF REEDLEY
AT&T
CITY OF REEDLEY
THE GAS COMPANY
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